

PULP & PAPER

"The Cellulose Age"

EDITORIALS

This Is a Real Emergency

Several million feet of timber, already worthless except for pulp, must be salvaged in the Rocky Mountain states very soon or it will be entirely worthless. In the Pulpwood Section of this issue is a report on developments in this regard and the apparent failure of competent witnesses to bestir any action on the part of Congress in this emergency. At last, so far, the Congressional attitude is definitely lukewarm.

It seems that where there are five or six billion feet of valuable timber going to waste that there ought to be a little more excitement about getting it utilized and a little more advance preparation for the additional billions of feet that are going to be killed in that area from further infestation than has been shown at the present time.

This magazine made some independent inquiries and the forester in that area, in writing to us recently, said the reason the infestation got started was because the war had taken so many men out of the Forest Service that they were shorthanded, and so when a big wind came along and blew down the timber, they had no way of knowing about it and before they could discover the situation, the bugs had gotten into the timber and were spreading through the entire area.

In spite of the war or anything else, we would like to bet if the timber had been owned by a private company, they would have had somebody in there and they would have probably dug down in the sock and gotten a road in there and gotten that timber out of there without any delay.

Some of the things private loggers did during the war with worn out tractors and one-horse shays is nothing short of miraculous. It looks like this situation merits wartime style of action, but quick.

Is There a Moral in This?

This is a true story, although we are not at liberty to give names—and perhaps there is a moral in it somewhere.

Following the war there began to develop an entirely new industry involving the distribution and sale of foods. Naturally this new industry represented a new market. One of the largest chemical organizations in the United States perceived in this market an opportunity to sell one of its products. But before this product could be sold it was necessary to develop another product—a paper product—to be used in conjunction. This huge organization began contacting mills, one after the other, big and little. The answer was always the same: "We have all the business we can take care of."

Except at one mill. This mill was just as busy, just as successful, as all the others. But it showed some interest. It developed the auxiliary product that was necessary. It found the wood, bought the machinery, built an addition to its plant. Today it stands alone, without competition, in one of the most spectacular new markets to come out of the postwar years—a pulp molded meat tray.

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The Production and Management Journal Covering
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"The Government never really goes into business, for it never makes ends meet; and that is the first requisite of business. It just mixes a little business with a lot of politics and no one ever gets a chance to find out what is actually going on."
Thomas A. Edison.

Supervisors' "Lament"

Here's an editorial in poetry which we read in the Paper Trade Review published in London. A lot of pulp and paper mill superintendents and foremen will no doubt cry "Hear! Hear!":

If he is pleasant, he is too familiar.
If he is sober-faced, he is a sourpuss.
If he is young, he doesn't know anything.
If he is old, he is an old stiff.
If he belongs to a lodge, the members expect favors.
If he goes to church, he is a hypocrite.
If he doesn't, he is a heathen.
If he drinks, he is an old souse.
If he talks to everybody, he's a gossip.
If he doesn't, he is stuck up.
If he insists that the rules of the shop be kept, he is too particular.
If he doesn't, he is too careless.
If he looks around, he's snooping.
If he doesn't, he's unobservant.
If he tries to settle all complaints he has to have the wisdom of Solomon.
If he worries about them, he'll soon be crazy.
Are there any good foremen?
Yes, plenty of them and they're not all in cemeteries!
Anyone still want to be a supervisor?

Small Tribute to "Peddlers"

He who works with his hands is a laborer. He who works with his hands and his head is a craftsman. He who works with his hands and his head and his heart is an artist.

And he who works with his hands and his head and his heart and his feet is a salesman.

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"More Fibers for Pulp and Paper" will be theme of our 1948 annual North American Review Number which is now on the presses. Complete statistical and interpretive reports will again make it the outstanding reference book of this industry.

PROGRAM AT NEW ORLEANS Congressman Hartley to Speak

U. S. Representative Hartley of New Jersey, co-author with Senator Taft of the Taft-Hartley bill, will be the May 21 luncheon speaker at the Superintendents National Convention in New Orleans' Hotel Roosevelt, May 19-21.

Friday, the 21st, is shaping up as one of the big days of the convention. A forenoon meeting on the subject of employee training will be held that day with A. G. Natwick, assistant resident manager of the Camas, Wash., mill of Crown Zellerbach Corp. as the moderator. In the afternoon, DeLoss Walker, of Chicago, publicist, who spoke at one of the recent Northern meetings, will discuss personnel relations.

The Allied Industries affiliates will hold their dinner on the evening of May 18. Meetings will start the next day, Wednesday, and continue through Friday.

Raymond F. Bennett, general superintendent of Ecusta Paper Corp., and president of the association, will be the presiding officer.

Bark Use Conference Planned in Boston Sept. 17

A conference on the utilization and chemistry of bark will be held Sept. 17th at the Massachusetts Institute of Technology, Boston, under the auspices of the Northeastern Wood Utilization Council. Developments in bark utilization from pulp and paper mills, as well as from sawmills and lumbering operations will be reviewed.

Attendance is by invitation and those interested should get in touch with Mr. E. L. Heermance, secretary, NEWUC, New Haven 6, Conn.

Dates Are Changed

Dates for the Canadian technical section's western branch meeting in Ocean Falls, B. C., have been changed from May 19 and 20 to May 26 and 27.

Contract for Mill Let

Contract has been let for the construction of the new mill of Coosa River Newsprint Co. to be erected on the Childersburg Arsenal site, near Talladega, Ala.

JOHN J. DEVINY, formerly deputy, has been appointed U. S. public printer by President Truman. He succeeds A. E. GIEGENGACK, who several times stirred up controversy by advocating that the government go into the papermaking business in competition with its own suppliers by building a government mill. Mr. Giegegack resigned that post Mar. 15 after holding it 13½ years and increasing the government printing business from \$18,000,000 to \$63,000,000 annually.

NEW BELOIT headbox and Fourdrinier on No. 9 machine at Crown Zellerbach's Camas, Wash., mill is reported to have improved quality of toilet and napkin stock made on this machine and improved output to more than 95% efficiency.

Second Newsprint Machine

Formal dedication of the new Bagley & Sewall newsprint machine was celebrated by Southland Paper Mills, Inc., Lufkin, Texas, on April 5. The first newsprint was actually produced on March 30.



WELL KNOWN IN THE PULP AND PAPER industries of two countries are members of this group enjoying a holiday trip together in Mexico. Behind them is one of the ancient Aztec pyramids. Left to right, in picture are: ROGER EGAN, Vice President of Bulkley, Dunton Pulp Co., New York; WENDELL L. COWLES, a partner in Bulkley, Dunton and Co., New York; MRS. EGAN; MRS. COWLES, and JOSE DE LA MACORRA, Jr., General Manager of the San Rafael Paper Manufacturing Co. and Subsidiaries (Cia. de las Fabricas de Papel de San Rafael y Anexas, S.A.) the biggest pulp and paper company in Mexico.

NPA Meets in Jersey

The spring meeting of the National Paperboard Association has been called for the Seaview Country Club, Absecon, N. J., April 28-29. Directors will meet Wednesday afternoon, April 28.

George E. Dyke, president of Robert Gair Co., Inc., is president of the association and W. H. Beckwith, vice president and manager of Morris Paper Mills, Morris, Ill., is vice president.

COMING INDUSTRY MEETINGS

- | | |
|--|--|
| Packaging Show—
Public Auditorium, Cleveland.....
.....Apr. 26-30 | TAPPI Empire State Section (East)
—Queensbury Hotel, Glens Falls,
N. Y.May 21 |
| National Paperboard Association—
Seaview Country Club, Absecon,
N. J.Apr. 28-29 | TAPPI New England Section—
Roger Smith Hotel, Holyoke, Mass.
.....May 21 |
| Southern Reg., National Council for
Stream Improvement—Edgewater
Gulf Hotel, Edgewater Park, Miss.
.....Apr. 28 | Western Branch, Canadian Techni-
cal Section—Ocean Falls, B. C.
.....May 26-27 |
| Penn.-N. J.-Del. Supts.—
Abraham Lincoln Hotel, Reading,
Pa.May 1 | Envelope Mfgs. of America—
White Sulphur Springs, W. Va.
.....June 10-11 |
| TAPPI Kalamazoo Valley Section—
Columbia Hotel, Kalamazoo, Mich.
.....May 6 | National Paper & Twine Assn.—
French Lick Springs, Ind.
.....June 11-12 |
| Joint TAPPI-Supts. Coast Meeting—
Gearhart, Ore.May 6-8 | TAPPI Fundamental Research—
Madison, Wis.Aug. 25-27 |
| National Paper Box Mfgs.—
Netherlands Plaza, Cincinnati.....
.....May 9-12 | Technical Section Canadian Assn.—
Harrison Hot Springs, B. C.
.....Sept. 8-9-10 |
| National Supts. Convention—
Roosevelt Hotel, New Orleans.....
.....May 19-21 | Northeastern Wood Utilization
Council—BostonSept. 17 |
| Supts. Michigan Division—Harris
Hotel, Kalamazoo, Mich.May 20 | TAPPI Mechanical Pulping—
Poland Springs, Maine.Sept. 27-29 |
| TAPPI Empire State Section (West)
—Prospect House, Niagara Falls,
N. Y.May 19 | TAPPI Engineering Conference—
Buffalo, N. Y.Oct. 25-28 |
| TAPPI Lake States Section—
Am. Legion Hall, Appleton, Wis.
.....May 11 | National Paper Trade Assn.—
Hotel Stevens, Chicago.Oct. 28-30 |
| | Paper Industry Salesmen—
Midston House, New York City—
Every Monday, 11 a.m.-2:30 p.m. |

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PAPER

War Clouds May Revive INDUSTRY DIVISION IN WASHINGTON

This industry is getting its mobilization personnel down on paper so that the equivalent of the Pulp and Paper Division of WPB of World War II will be ready to go should that be necessary, it has been learned from reliable sources by **PULP & PAPER**. It is understood that certain other industries, including steel, have made similar moves, some of them at the request of Washington and some voluntarily. "Chief difficulty," said one observer, "would be persuading the men

who did the best job last time to go down to Washington again."

Several months ago administration officials indicated to the industry that they would like to see the return of pulp allocation, but that request was turned back. Even now, a prominent executive close to the picture told **PULP & PAPER**, the industry will not rush into allocation until absolutely necessary.

It will be recalled that even before World War II, there were industry agencies at work at Washington.

cess of the maximum production of which the industry was then thought capable."

In discussing possible revival of the problems faced in the last war, Mr. Tinker warned the merchants that this industry is "entering a period of stresses and strain, the extent of which we do not know." He said it may mean (1) shortages of pulpwood because of shortage of manpower, although mechanization may keep production up somewhat; (2) shortages of critical materials for machinery; (3) mobilization of the industry to produce critical pulp and paper products.

"It is hoped everything will be done to stimulate maximum production rather than to restrict it," he said.

Discussed by NPA Speakers

Even if national defense or wartime controls "do not result in shortages in the most critical fields, it will negate all history if they fail to result in reduced production."

This prediction was made by Cola G. Parker, new president of the American Paper & Pulp Assn. and president of Kimberly-Clark, in an address before the National Paper Trade Association in New York on Apr. 6.

The U. S. pulp and paper industry must rely on its own advisory industry council now functioning in the Department of Commerce to "bring the best intelligence to bear on problems arising from the defense and European relief programs," said E. W. Tinker, executive secretary of APPA, and another featured speaker at the NPA conclave.

Mr. Parker recalled that it was necessary in 1943 to send a delegation to visit Donald Nelson, then head of WPB, to outline the causes of pulp and paper crisis which were hampering the war effort and the belated steps then taken to reverse a government policy of restriction.

Mr. Parker urged "patriotic, unselfish service" by the industry and a "willingness once more to supply personnel" for government agencies.

He said, however, that "often governments thrive on crisis, emergencies, real or manufactured" and that "the 'news' of recent days didn't seem to be new" to him.

If there is no war nor wartime controls, Mr. Parker said basic trends of recent years indicate a "basic paper consumption in 1955 (in the U. S.) of about 30,000,000 tons; that is 400 lbs. per capita for a total population of 150,000. "Allowing 5,000,000 tons of imports, he said this would indicate U. S. production could reach 25,000,000 tons or 4,000,000 tons more than were produced in 1947.

"In 1948 in the light of increased capacities," he said, "the industry could operate at a production ratio of 95% of estimated year-end capacity and produce 22,100,000 tons if there is no general slump in business, and this would result in satisfying a high level of demand, while restoring inventories to normal."

It is in the "general public interest,"

said Mr. Parker, for paper merchants to guard against too much inventory. This happened in the early 40's, he said, in the wake of "fear stories" emanating from government circles forecasting a near-future demand 6 to 10 million tons in ex-

Parker, President of APPA, On TAPPI Program

Cola G. Parker, new president of the American Paper & Pulp Association and president of Kimberly Clark Corp., was the scheduled speaker at the Lake States TAPPI meeting on Apr. 13 at American Legion clubhouse in Appleton, Wis. Mr. Parker's subject was "Economic Trends in the Paper Industry."



IN INDUSTRY NEWS—(l. to r.): DR. M. N. DAVIS, appointed Associate Technical Director of Kimberly-Clark Corp., Neenah, Wis. He will continue as Supt. of K-C's Physics Research Lab. Graduate of Milton College and Wisconsin, he is inventor of Bausch and Lomb opacimeter and Thwing formation tester. E. BLAKE BALLANTINE, Vice Pres. of H. R. MacMillan Export Co., who has been assigned job of organizing and building that company's proposed 200-225-ton sulfate pulp mill on Vancouver Island. Mr. Ballantine has been prominent in plywood and lumber fields.

E. M. HERB, President of Westminster Paper Co., New Westminster, B. C., who returned from 3 months' flying trip to Australia and New Zealand with report that financing is being arranged by New Zealand Forest Products, Ltd., for an unbleached kraft pulp mill at Whakatame, N. Z., where groundwood pulp is now made from pine.

T. W. TOOVEY, authority on bleaching and chemical applications, who has joined Cheney Bigelow Wire Works as Sales Engineer. He developed a high alpha pulp process in Czechoslovakia, worked in charge of cooking and bleaching at British Columbia Pulp & Paper Co., Port Alice, B. C.



IN INDUSTRY NEWS (l. to r.)—GUY McCRAE MINARD, who has been appointed Manager of Spruce Falls Power & Paper Co. mill and townsite operations at Kapuskasing, Ontario; EMMA W. ROSS, graduate nurse and Army nurse in the Pacific Theater of War, who has been appointed Safety Engineer of Pacific Paperboard Co., Longview, Wash.; JAMES A. McALEER, who is new Manager of the Pulp and Paper Mill Dept., Mason-Nailan Regulator Co., Milton, Mass.; and PAUL B. FOWLER, of Portsmouth, N. H., who has taken position with E. D. Jones & Sons as Sales Engineer.

He was with Crocker-McElwain Co. in Holyoke and Supt. of the Morley board mill in Portsmouth before and after Navy war service.

New Machine at Miquon

IS KEY TO MODERNIZATION

When, early this year, the new 120-inch machine started up at W. C. Hamilton & Sons, Inc., the 92-year-old paper mill at Miquon, Pennsylvania, was taking another long step forward in its program to bring the historic operations into the modern paper mill class. That goal has now been accomplished with the installation of additional new equipment and the completion of two new buildings.

Even before these improvements, however, the Miquon mill was a sizable and up-to-date manufactory running six paper machines. The present program really began in 1940 with the installation of a 90-inch machine added to the five already in operation. Then the expansion plans were interrupted by the war. The new 120-inch machine represents the key improvement in a more than \$1,000,000 program which puts W. C. Hamilton & Sons on a modern production level. The move is of great interest to the industry because it is perhaps the first example of an old mill in Pennsylvania, cradle of the paper industry in America, bringing itself to full modernization in order to compete with newer mills. It might well mark the beginning of a trend in the Middle Atlantic and New England areas.

Trout Run History

That would not be an unusual situation for the mills on Trout Run because that location has pioneered since 1746 when Anthony Newhouse built his mill at Miquon (the Indian name for William Penn) on Trout Run. Newhouse made paper for the money authorized by the Pennsylvania Assembly and he got the order from Benjamin Franklin, who, incidentally, sold rats to Mr. Newhouse for the mill.

Mr. Newhouse sold the mill in 1752 to Jacob Hagey who willed it to his son



HUGO HANSON, President of W. C. Hamilton & Sons, Miquon, Pa., is also President of the Pulp Consumers' Association and a leading figure in that part of the industry represented by non-integrated mills.

Daniel. Then in 1856 the property was bought by Edwin Cope of the papermaking firm of Magarge and Cope, and by this time Henry Fourdrinier had built his machine in Kent, England, from Louis Robert's plans—and the face of the industry had changed. For a manager, Mr. Cope engaged W. C. Hamilton who had worked at the Glen Mills on Chester Creek, Del. In 1865 Mr. Hamilton bought the mill. Today the Hamilton family holds an interest in the mill, but is not actively participating in its management. Control was purchased in 1924 by the late Howard Taylor who had been vice president. Joseph H. Dunton is vice president Collins.

President of the modern version of

W. C. Hamilton & Sons is Hugo Hanson who came to Miquon in 1928 from the Eastern Corp. and who is now serving his second term as president of the Pulp Consumers Association. He was elected president of Hamilton in 1936 at the death of Mr. Taylor. Lane Taylor, son of the man who bought control from the Hamiltons, is now executive vice president. Joseph H. Dunton is vice president in charge of sales.

Boosted to 150 Tons

The present management has brought the production to 300,000 pounds per day and the growth of the mill is illustrated by figures which show a capacity of only 3,000 in 1865; 8,000 in 1882; and 50,000 in 1896. Engaged today in the enterprise are men and women who are the second and third generation in the Hamilton mill. These people tell you proudly that history has always been an important ingredient in Hamilton papers, and that Hamilton papers have a way of perpetuating historical events. There is not only the paper money of the Philadelphia Assembly, a collector's item today. There is, for example, the child's book called *Uncle John's Story—His First Visit to the Centennial* with the inscription on the fly-leaf reading: "This paper was made at the Centennial Philadelphia Exposition 1876 by W. C. Hamilton & Sons and printed there by Campbell Brothers (signed) Charles Hamilton, in charge of papermaking exhibit." And now there is the official book *Freedom Train* printed by the Princeton University Press on Hamilton paper.

The Hamilton line is distributed these days on a nationwide basis and includes: No. 1 sulfite Hamilton bond, ledger and mimeograph paper; Andorra and Gainsborough text and cover stock; Victorian, Weycroft and Kilmory text; Old Treaty Bond, a rag bond; and Hamilton Offset.

The new machine is installed in a brick and steel daylighted structure, 350 by 62 feet, which is designed to handle an eighth machine of similar size. The new machine is 120 inches, trims 106 inches, and operates up to 750 feet per minute. It represents a combination of several well known machinery companies. Moore and White built the dry end; Bagley and Sewall the wet end; and Downington installed the suction presses and couch rolls. The modern direct drives are by Westinghouse. Forced vapor control is from Mid-West Fulton.

In connection with the new machine is a new Dilts Hydrapulper, and a Dilts-Stebbins pulping system with the Westinghouse control panel under Stebbins tile cover. The pH control instruments are Leeds & Northrup.

An unusual feature at Hamilton is the

WHITE DOTTED LINES over this air view of the W. C. Hamilton & Sons mill at Miquon, Pa., show location of new buildings now being completed. White outline to left is new office building. White outline to right is new machine building in which one machine already is installed. There is space for another machine to be installed in the future.



handling of the paper at the dry end. Rewinding is eliminated, the paper being carried directly to the cutter and lay-boy through a five-reel rotary stand. This handling is standard procedure on all Hamilton machines which, in addition to the 120 and 116-inch machines, are in the following widths: 110 inches, 90 inches, 86 inches, 82 inches, and a 64-inch machine for specialties and pilot work.

The modern machine room is Carrier air-pressure controlled. A 10-ton crane is installed overhead. Moisture control of Hamilton papers is on the machine and the new layout includes moisture control, size dryer and steam control by Foxboro.

Other Improvements

There are other improvements being brought to completion at Hamilton. These include a new elevator, and a modern loading platform which will handle four railroad cars and five trucks at one time.

The older parts of the mill have been brought into maximum relation to the new construction. Housekeeping and layout in the older buildings are notable for a mill of this age, and the attention to quality is everywhere apparent. An example of the latter are the girls who sit on high stools at the dry end of machines running reproduction paper and watch for blemishes in the sheet. It is a quality control that only the naked eye and the brain can perform satisfactorily.

Pulp preparation equipment includes three 1000-lb. beaters, three 2000-lb., and twelve 2500-lb. beaters. Nine various refiners, five washers and four rotaries. Finishing equipment includes a 46-inch supercalender, embossing department, special department for producing "linen" and hand-made effects, and complete layout of Seybold cutters and trimmers.

Improvements are going forward on the power plant end, with the older boilers being converted from coal to oil. However, 90% of the power requirements are furnished by a 400-hp. pressure boiler installed a few years ago and which will be duplicated in the long-range Hamilton plan.

An interesting feature is the use to which six old rotating digesters have been put. These digesters are part of the soda pulp mill which was dismantled in 1928



SCENES AT W. C. HAMILTON MILL—Top: l. to r.: HUGO HANSON, President; JOSEPH DUNTON, Vice President in charge of sales; LANE TAYLOR, Vice President, look over the new machine. Bottom: All paper comes directly from machine to a rotary stand and over to the layboy and cutter. Rigid inspection is a rule at Hamilton mill.

and are now used for cooking rags.

Crowning the improvements at Hamilton is a new modern office building where

Hamilton management gears purchase, distribution and sales to the efficiency of the mill itself.

CHANGES AT LOS ANGELES MILL

The recently-acquired Container Corp. of America mill in Los Angeles is now 100 per cent on 9-pt. board for boxes on both its Fourdrinier machines. Production is about 70 tons a day.

This mill at 2001 East 57th, Los Angeles 11, it will be recalled was the former California-Oregon Paper Mills and was making parchment also, but when it was sold last year, the parchment machine was moved by former owners to their Columbia River Paper Mills.

Actually this mill in Los Angeles is now owned by Owens-Illinois Glass Co., which leases it to Container Corp. of America. Both had box plants in Los Angeles, to which the mill was supplying



board. But Owens-Illinois recently sold its Los Angeles box plant to International Paper Co., a company which has been broadly integrating operations by ac-

OFFICIALS OF CONTAINER CORP. OF AMERICA in Los Angeles (l. to r.)—WALTER QUINN, Mgr., who hails from Philadelphia; LUTHER CRITZER, Supt., who came from Wilmington, Del., and ALONZO H. HATCH, Plant Engineer. Mr. Hatch is recently elected Chairman of Paper Makers and Associates of Southern California.

quiring converting plants all over the U. S. All the production at the Los Angeles paper mill now goes to Container Corp.

Container Corp. moved in two of its experienced men from the east—Walter Quinn, from Philadelphia, as manager, and Luther Critzer, from Wilmington, Del., as superintendent. Paul Onan is assistant manager, and Dick Burnett is in charge of personnel and purchasing.

THE STORY OF ATENQUIQUE MEXICO'S DREAM MILL

Since the war's end, the "mystery mill" of North America is the Atenquique mill of Mexico.

It has probably been as widely discussed as any new mill, but even so, very little actually reliable information has been known about it.

Entirely new and modern equipment from the United States went into it—shipped south of the border as part of a "good neighbor" policy intensified as a war policy. At that time, much of this equipment was unavailable to U. S. mills.

It started up on Jan. 18, 1947, as a private enterprise, exporting kraft pulp to the United States. Now it is owned by the government, which visualizes Atenquique as the key unit in a self-sufficient Mexican kraft industry.

To find out the facts about Atenquique and to lay at rest unfounded rumor, **PULP & PAPER** sent one of its editors to

this remote mill, and the following article is the result of the journey.

In a hot little valley, violently shaped by erupting volcanoes now long since quiet and by erosion of torrential, rain-swollen rivers is one of America's new and modern kraft mills. It is in the state of Jalisco, Mexico, near the Pacific Coast.

This is the Compania Industrial de Atenquique, once envisaged as just the first unit in a diversified chemical industrial empire dreamed by a brilliant Czechoslovak immigrant, Enrique Anisz. Sr. Anisz came to Mexico as a smalltime storekeeper and had risen to eminence as one of its leading industrial promoters when he died, before he could see his mill in operation.

Atenquique did not exist until the mill and the town were built. The cost of the

mill was about \$10,000,000—a big investment in Mexico in view of comparatively low construction and labor costs in that country. It is located on the Tuxpan River, with hillsides of pine and a snowcapped mountain as a western backdrop. But there are barren hills and deserts all around it, too, interspersed by reclaimed valleys growing oranges and sugar cane, and by the wooded hills.

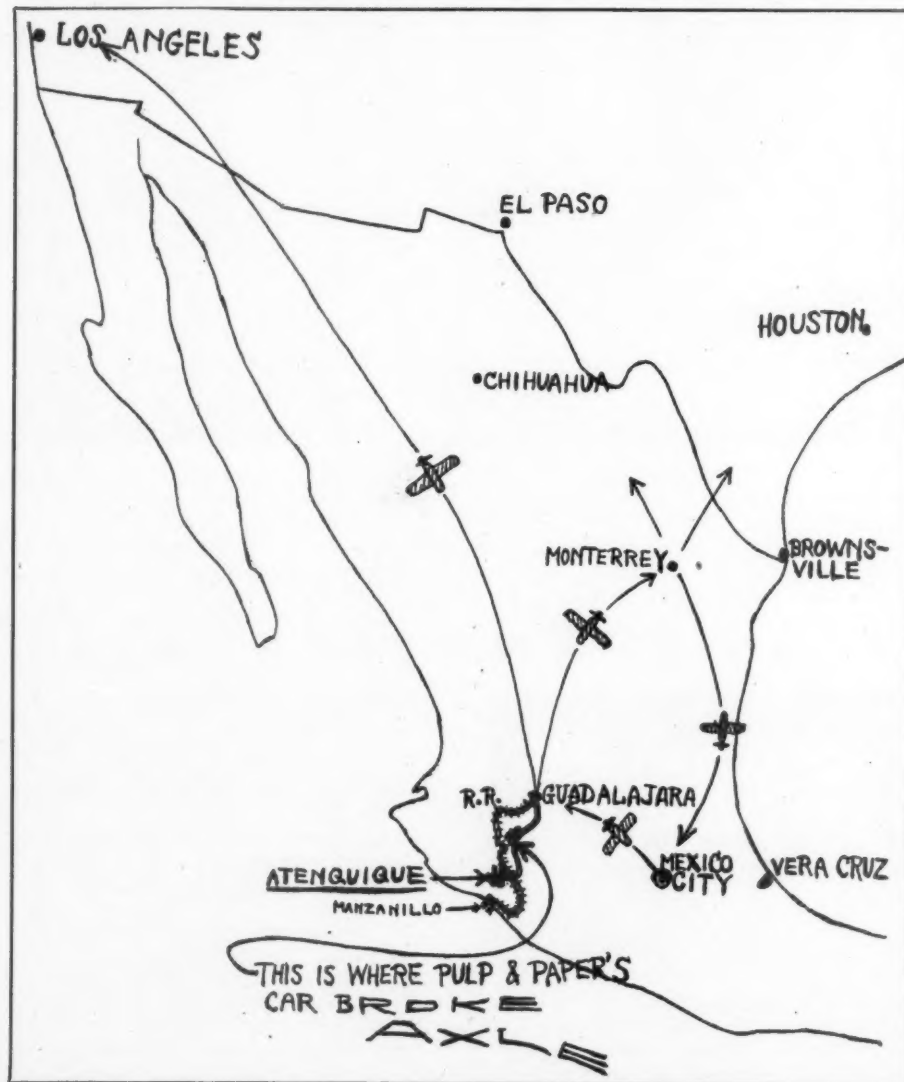
One of the more antique railroad lines of Mexico winds slowly but eventually to the new mill town from Guadalajara, second largest city of Mexico. Atenquique is 135 miles south of Guadalajara.

The railroad, each train carrying armed guards, courses onward to Manzanillo, the seaport, which is another 120 miles southwest of Atenquique. But for comfort and speed, travel by car is preferred and for a short time Mr. Anisz's son operated a shuttle plane service with Guadalajara.

Atenquique probably isn't on any maps other than the one published with this article, but it is just between Ciudad Guizman and Colima, which are shown on some maps.

Even travel by car is not smooth sailing, as witness the return journey to Guadalajara by **PULP & PAPER'S** editor, which required two cars. The first was left on a washboard road with a broken axle.

Malaria, scorpions, and snakes were a few items that builders and operators of this mill have had to contend with. DDT spraying of every house in the community is carried out every few weeks. DDT spraying of the entire countryside by a highpowered spray from a truck is also carried out periodically. Malaria is just about licked, and snakes aren't seen any more near the mill, but DDT has no effect on scorpions. The three doctors in the community are handy with their hypodermics, otherwise there probably would have been fatalities from scorpion bites. One American superintendent was a vic-



THIS IS PROBABLY THE FIRST MAP ever published showing the new town of Atenquique in Jalisco province in Mexico—site of the Mexican government's kraft pulp and paper mill.

From Guadalajara, Mexico's second largest city, it is 135 miles by a circuitous and antiquated railroad to Atenquique. The washboard highway isn't much better as indicated on this map. Erwin Anisz operated a shuttle plane service with his own plane until the government ousted him in taking over the mill ownership and now the Atenquique airport is unsafe because of lack of upkeep.

But getting to Guadalajara is no trouble at all. Commercial air lines from three directions—Monterrey, Mexico City and Los Angeles—are shown on this map, with planes once or twice a day each direction. Mexican air lines have a perfect record of safety for many years of commercial flying—a record that many other countries might well envy. These lines were operated with Mexican flyers long before some of the well known lines north of the border and generally they are now using Douglas four-engine or smaller Douglas planes.

KEY PERSONNEL AT ATENQUIQUE MILL:

Top, l. to r.: DAVID KUHE, Mill Mgr.; FELIPE CENICEROS, Personnel Mgr., who is brother of ex-ambassador J. A. Cenicerros, Gen. Mgr. of the company; STANLEY A. WILKES, Paper Mill Supt.; TALMADGE BULLOCK, Pulp Mill Supt., and WM. A. ROBINSON, Tech. Director.

Below, l. to r.: ANGEL ROSALES, Chief Electrician; ARTURO RODRIGUEZ, Power and Recovery Supt.; CAPT. MORENO, Townsite Mgr.; GARZA OBREGON, Master Mechanic, and ANTONIO SANCHEZ ALDANO, Woods Supt., at wheel of jeep in which he took PULP & PAPER editor on tour of logging operations.

tim on the very night he had entertained PULP & PAPER'S representative in his home.

Virgin Timber Supports Mill

By now the reader is perhaps convinced that this is an unusual pulp and paper mill. In fact, in one important respect it is apparently unique. It is probably the only mill in the entire world—outside of Russia or possibly one or two other faraway countries—which is entirely dependent on virgin wood. It is certainly the only mill in the western world—Europe and America—entirely supported by virgin timber. The rings of one tree cut for the mill showed it was 179 years old.

All of the wood is pine and another unusual thing—it is nearly all quartered or split in the woods before being trucked to the mill, as most of it is over 18 inches diameter, which is the largest the chipper will take. It is long-fibered wood, low in resin content and there are no cat-faces to contend with.

We might mention a few other unusual points about Atenquique:

Its water problem—caused by the silt, mud and volcanic ash in the river, especially in the rainy season.

The fact that both pulp and paper are made in rolls—no use trying to save space by making pulp in sheets for baling since only a limited weight is allowed on Mexican railroad cars.

The unusual union requirements—15 minutes lunch for shift workers, hot plates in all departments where workers can warm up their tortillas, etc.

Pulp is made in rolls for shipment, as well as paper, instead of being packaged in bales. This is because legal limits on railroad car capacities make it unnecessary to try to save space with oblong packaging.

This mill is the first in Mexico's history to ever ship pulp to outside its borders. Substantial amounts of its pulp have been shipped to the United States mills in the past year—partly reversing an historic direction of pulp traffic. The government has also clapped a tariff on imports of kraft board, to build up the rapidly expanding kraft board industry in Mexico and the raw material for this production comes from Atenquique, supplying new mills in Mexico. Kraft board imports from Sweden and the U. S. have virtually ceased.

Rated 80 Tons—Has Made 148

With one machine, a 136-inch (120-inch trim) Black Clawson Fourdrinier, and incidentally with the first General Electric complete electronic control for



OUR COVER PICTURE—

● is a rare view of Mexico's much discussed Atenquique mill.

In this picture, from left to right, are shown the conical chip silos, the pulp mill and the paper mill—the long building with finishing department at right end. High building just behind paper mill is the recovery plant and next to that, a lower building, is the power plant.

In foreground, on Atenquique River, is water pump house. Cylindrical fire tank is on cliff at left and small white building back of mill is business office.

The Mexicans call both the mountains "Colima." Peak on left is Volcan de Fuego (fire) de Colima, which erupted in 1941, and on right is snow-capped Volcan de Nieve (snow) de Colima. Both are about 14,000 to 15,000 feet high, but the one on left is hot and no snow stays on it.

section drive, Atenquique is rated as an 80 tons per day mill. It should make that much pulp or heavy board, or 60 tons of 30-lb. bag paper. But the experienced high-speed American operators from the Southern U. S. kraft industry who hold key positions at Atenquique have achieved much more than the rated capacity. The record day was 148 tons of mixed board and pulp. One month they averaged 135 tons daily.

Atenquique's production of pulp and board from the start-up on Jan. 18, 1947 to Feb. 14, 1948, was 51,644,534 lbs. (nearly 26,000 tons). Of this, 29,878,848 lbs. were in pulp and 21,765,686 lbs. in paper. About 30 carloads of the pulp went to mills in the United States.

The builder of Atenquique was Arthur Ready, its first manager, formerly with Rayonier Incorporated. Mr. Ready left Atenquique to be development engineer for the four National Container mills in the U. S. but died suddenly just as he

was getting under way with this work at Jacksonville, Fla. George F. Hardy & Son was the consulting engineering firm for Atenquique, and John A. Hardy spent considerable time there.

Erwin Anisz, son of the promoter of Atenquique, spent considerable time in Washington and in machinery manufacturing centers in the United States, acquiring the equipment for Atenquique. When his father, Enrique, died, in Feb. 1946, Erwin became general manager of the company. When Mr. Ready left, Sigrid Salveson, who had built a mill in New England and is now in the Pacific Northwest, took charge of completing construction.

Present Top Personnel

David Kuhe, former manager of the kraft mills at Plymouth, N. C., and Panama City, Fla., was engaged by Erwin Anisz as Atenquique mill manager shortly before the government took over. When that happened, Erwin went out (he's running a sugar industry now at Guadalajara) but Mr. Kuhe has remained on.

Government ownership brought in a new top management for the company, inexperienced in pulp and paper making. This has greatly increased the responsibilities of Mr. Kuhe and his staff of American operators and U. S. trained Mexicans—who actually run the mill. The general manager of the company is Jose Angel Cenicerros, lawyer and former Ambassador to Cuba, whose offices are in Mexico City in the Jalisco building. Also at this address in Mexico City is the purchasing agent, Manuel R. Cortez.

Assistant general manager is a Spaniard, Alvaro de Murga, a mining engineer who is widely known in Mexico in that industry. He has a residence at Atenquique, but if he is away, the next



LOWER LEFT SHOWS the California-type homes built for employees of the Atenquique mill on the hillsides above the mill itself.

LOWER RIGHT—The late Enrique Anisz, the original promoter of the mill, an industrialist of Guadalajara, who migrated to Mexico from Czechoslovakia.

UPPER VIEW—President Aleman of Mexico (center with mustache) had not yet been elected to that office when he visited the new mill. His campaign poster,

bearing the name of the Atenquique labor union below the slogan "Aleman Will Be President" was raised for this picture. Second from left, straw hat under arm, is Sigurd Salvesson, Construction Engineer who is now in Pacific Northwest. Young man in dark jacket on left of the President is Erwin Anisz, who was General Manager of the mill until the government took it over. He is the son of the original promoter. To left of Erwin Anisz is W. W. Johnson, original Townsite Manager.

in line is Felipe Cenicerros, who has the title of personnel manager. He is the brother of the general manager. Under him is Capitan Eligio Lopez Moreno, town site manager and responsible for all company properties and supplies in Atenquique outside of the mill itself.

The staff heading up operations under Mr. Kuhe are:

Stanley A. Wilkes, paper mill superintendent.

Talmadge B. Bullock, pulp mill superintendent.

William A. Robinson, technical director.

Arturo Rodriguez Ulloa, power and re-

covery superintendent.

Angel Rosales de la Mora, chief electrician.

Garza Obregon, master mechanic.

Louis Troncona, chief chemist.

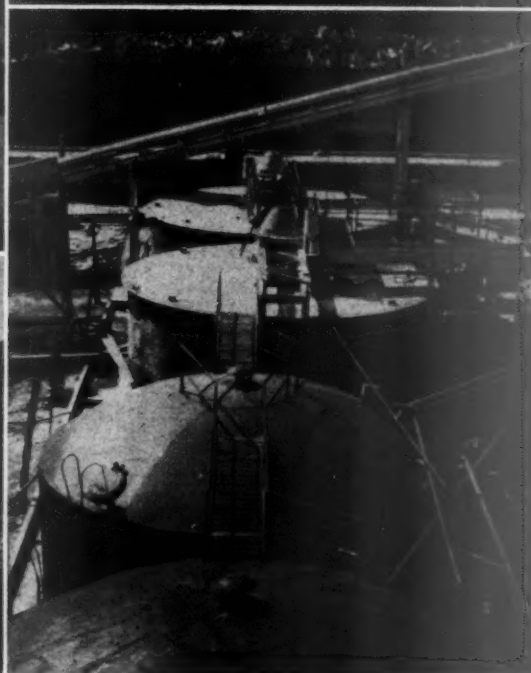
Jaime Oseguera, traffic manager.

Mr. Kuhe, a native of New York City, went west as a young man and while living in Chicago, earned a degree in chemical engineering at the University of Wisconsin, working summers in Oconto Falls and at The Northwest Paper Co., Cloquet, Minn. He spent 17 years with International Paper Co., in both Northern and Southern mills such as Rumford, Me.; Yorkhaven, Pa.; Marinette, Wis.,

until he became manager at Panama City. He was manager at North Carolina Pulp Co. in Plymouth when called to Atenquique.

Also a New Yorker, but born in Buffalo, is Mr. Wilkes, whose first mill job was in Mosinee, Wis., in 1917. Gilman, Vt.; Manistee, Mich., and 15 years in Southern Kraft mills—Bastrop, La.; Camden, Ark., and Mobile, Ala.—six years as assistant superintendent at St. Helens, Ore., and the same position at Jacksonville, Fla., where he helped start up National Container, were highlights in his career.

Incidentally, Mr. Wilkes has five brothers in U. S. mills—Felix, superintendent



ATENQUIQUE VIEWS taken by PULP & PAPER with 35 mm. film. Top left is general view, with r. r. bridge beyond mill. Below it the Black-Clawson machine showing Cameron winder and Pope reel. At lower left, California type homes of top personnel of mill, terraced on hillside. Upper right—Fourdrinier section looking toward dryers. Below, liquor tanks and settling tanks and wood pile beyond.

at Manistee; Walter, superintendent at St. Mary's, Fla.; Edward at Mosinee; Jack at Grand Rapids and Robert at Jacksonville.

Mr. Bullock, although born and schooled in Bogalusa, La., didn't work in that paper town—his first job being in 1930 at Bastrop, La., followed by Mobile, Panama City and Georgetown, all Southern Kraft mills. He was operator at St. Joe Paper Co., St. Joe, Fla., when picked for the Mexican post.

Mr. Robinson was born in Jackson-

ville, graduated from U. of Florida in chemical engineering and started mill work in '37. H & W Co. in Mobile; Florida Pulp & Paper Co. and Container Corp. of America in Fernandina, Fla., were his posts.

Sr. Obregon, a distant relative of the famous General Obregon of Mexico, worked in the Ford factory in Dearborn, Mich., and in the government printing and engraving plant in Mexico City.

Chief Electrician Rosales, U. of Mexico graduate, spent two years with Gen-

eral Electric in Schenectady, N. Y., and specialized in industrial electronics in the GE school.

Sr. Rodriguez, power-recovery superintendent, graduated from Georgia Tech, worked with Fairbanks Morse and Allied Engineering Co., before returning to Mexico to be engineer with Electric Bond & Share Co., which controls most of the power facilities of Mexico.

Other Americans who were formerly at Atenquique are: Lamar Murray, pulp mill superintendent, from Bogalusa, now



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ON OPPOSITE PAGE are pictures taken by PULP & PAPER on a "Jeep-Tour" of Atenquique's logging operations in canyons and mountains of west central Mexico. Separate company supplies wood at high cost. But mechanization is opening up pine forests of Mexico.

1. Logging Supt. Antonio Sanchez Aldana and logs cut to 10 ft. 6 in. lengths, piled at mountain roadside, waiting for trucks. Winches are used when they can't roll logs to roadside.
2. PULP & PAPER Editor Wilson and jeep which toured logging roads with grades up to 30 degrees, and visited villages where communal groups of "agraristas" own "ejidos," as timber areas are called which were given to them in the Mexican Revolution.
3. Atenquique is perhaps the only mill in the world entirely supported by virgin timber and some of it is big wood.
4. This boy fills his buckets and logging truck fills its radiator at same public fountain in village of Masos.
5. Simonds Saw & Tool Steel Co. and Corley saws of 60 and 57 inches are used to split wood too big for 18-inch chipper mouth.
6. Mercury power saws of 6 or 11 hp. are used to cut logs at pulpwood mills to 5 ft. 3 in. lengths, before they go to barker at pulp mill.
7. Carriage and log being split. Diesel engine in back left.
8. After power saws reduce log lengths, these men with peevies roll logs to sawmill for splitting.
9. Load of "raja" or split wood on way to Atenquique mill.
10. Caterpillar Diesel No. 13000 drives carriage and saw at one of pulpwood mills.

at the new Brown Co. kraft mill in Berlin, N. H.; Walter Rodowski, technical director, from Wisconsin, who went to Ontario; W. K. Brooks, power superintendent who went to the new Alabama Pulp & Paper Co. at Cantonment, Fla., and Robert Irwin, plant engineer, now at the new Robert Gair mill in Port Wentworth, Ga.

Wood Production

Wood production for this unusual mill is one of the most interesting features of its operation and PULP & PAPER made two trips by jeep into the surrounding mountainous country to observe first hand this important phase of the new industry.

In large portions of the state of Jalisco the government has forbidden the cutting of any timber except for this mill. It has set aside 500 square miles of timberland for this mill, probably well over 3 million cords of wood. Government control of timber cutting in Mexico is absolute. Its foresters mark every tree that can be cut and later they check up on the fallen trees, measuring the amount of wood fallen.

One engineer led a four-man government crew in marking pine for cutting in the area visited. One of his three assistants measured the diameter of the tree selected, another slashed it near the base and the third marked the open slash with a hammer bearing the letter A for Atenquique and the number of the government crew.

Yet there is proportionately very little timber in Mexico which is actually owned by the government. A private company, independent of the mill, owns a large portion of the timber in Jalisco and it is this company which operates six sawmills now serving the Atenquique mill. But there are also extensive areas of timberlands in Mexico, and in Jalisco, which are known as "ejidos."

What the "ejidio" is and how it came about, would take a chapter in itself. But it is a legacy of the Mexican Revolution and there seems to be very few people north of the Rio Grande who have any conception of the way in which this revolution has brought into existence a genuine Indian government—based primarily on historic Indian ideals and ideas of economic and social justice.

The "ejidio" is a plot of timber which

was expropriated from a private owner or owners and given to a large group of men in a village. Big private tracts were broken up and parceled out to several village groups. These new owners are called "agraristas" but a lot of them were probably neither workers nor farmers, in the true meaning of those words, for they had neither steady work nor farms before they were given the gift of the timberlands. But it is not the purpose of this article to philosophize on this development—the important fact is that in Mexico the "ejidio" is one of the most common forms of timber ownership and probably will be for a long time to come.

Wood is now being trucked from one to 45 miles to the Atenquique mill and government foresters estimate there is plenty of it in Jalisco state to keep the one machine going in perpetuity. In the selective cutting being carried on, they have marked up to 40% of the trees in certain areas. Under a new 1948 Mexican forest law, nurseries and reforestation are required of all timber users, but thus far in the Jalisco area the steep hillsides have facilitated natural re-seeding.

Pine trees of 20 to 30 inches average diameter were literally dropped into canyons from steep hillsides. As far as possible, the logging roads are built at the lowest possible levels in the canyons and valleys, and logs are rolled down on their own power, generally, and stacked along the roadside. Even so, roads PULP & PAPER'S jeep traveled in the vicinity of the mill had grades up to 15 to 30 degrees. Winches were being used to bring logs to roadside where necessary.

One of the most serious handicaps which the Atenquique mill operates under is the high price of its wood—probably the highest price paid anywhere for pulpwood. Wood costs up to \$40 a cord, U. S. money, which is far more expensive than any pulpwood in the U. S. and Canada. In fact, it is more than twice the cost of similar wood in most sections.

Part of the high cost is unquestionably due to the great amount of hand labor. Apparently, some of the cost is also due to various "interested" groups. But Mexico is just beginning to tap its vast pine resources and this is not an insurmountable problem. Some day costs will be greatly reduced, mainly by more mechanization.

Hand labor loads the trucks on the roadsides, where the timber is cut to 10 ft. 6 inch lengths before loading. There is a great deal of hand labor at each of the sawmills, rolling logs into position with peevies. Advantage is taken of slopes in this work. Probably because of the extremely hot weather generally prevailing, and possibly because of general inexperience, it seems that about twice as much hand labor is in use than would be required for the same work by hand in northern climes.

Mechanization Is Starting

But mechanization is making a start in Mexican woods operations. At the sawmills PULP & PAPER visited—at Los Masos and at Alpizahuatl—there are three or four Caterpillars to each mill, being used as dozers, winches or just as sources of power. A Caterpillar Diesel No. 13,000 drives one carriage and saw, which reduced logs to less than 18 inches diameter, the capacity width of the pulp mill chipper. Logs are split two to 10 times. Simond Saw & Steel Co. and Corley saws of 60 and 57 inches diameter are used.

Ahead of the sawmill, Mercury power saws are used to reduce the length of logs to 5 ft. 3 inches, the size handled at the mill. Quite a few Mercury power saws are also used in falling and bucking in the woods, although two man hand-saws are also in use. For this large diameter pine Mercury power saws of either 6 or 11 horsepower are doing a good job.

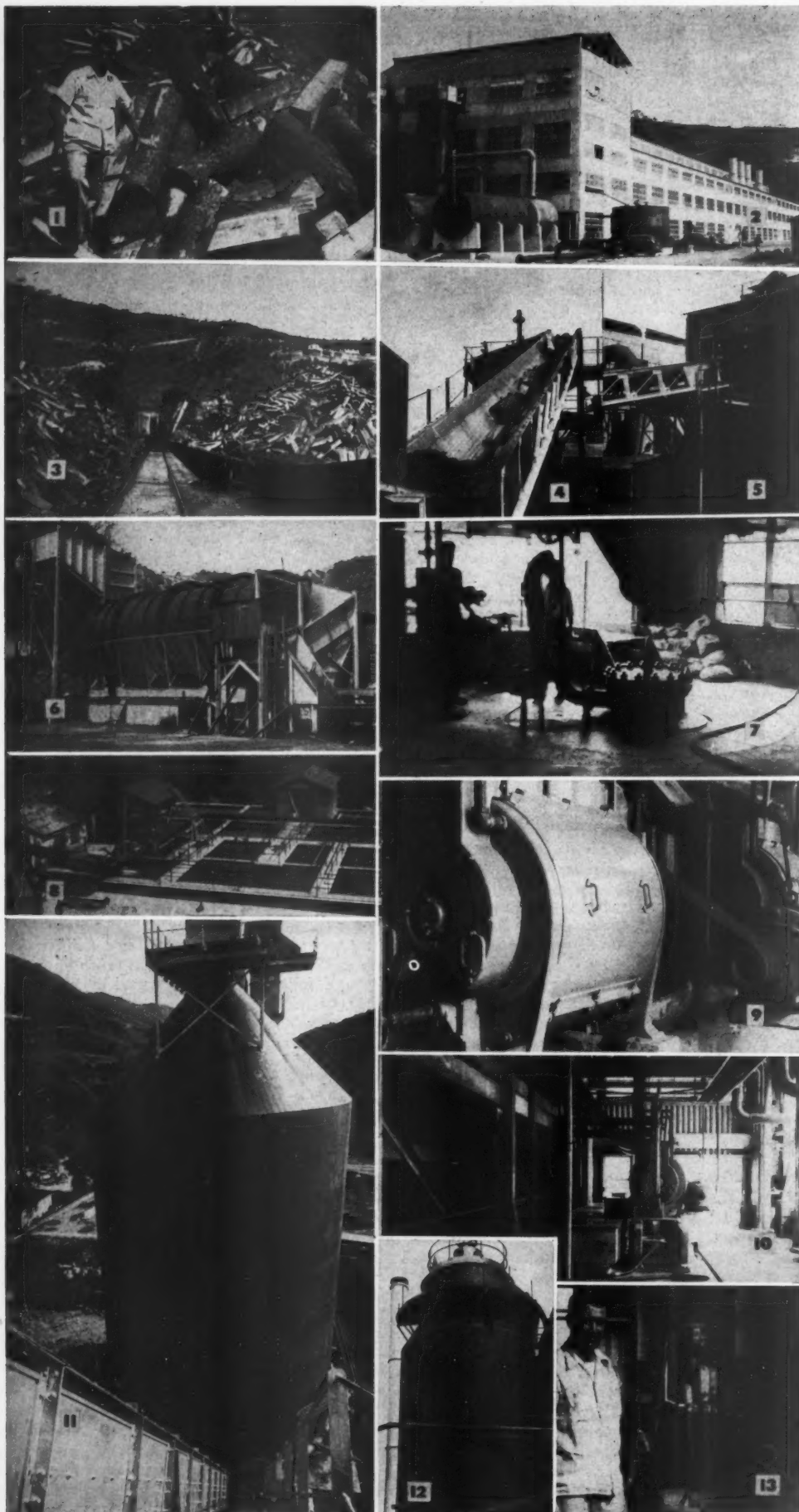
All kinds of trucks are used—about 50 Fords and Chevrolets for the steepest grades, and 12 Macks and Whites and Kenworth Diesels with trailers, where roads are less steep. The Mexican government will not allow trucks with double rear axles on the highways and it does not permit late night trucking.

There are about 700 men employed in the woods. Each of the sawmills has two shifts, with a crew of 25 men per shift. Each sawmill produces 115 to 130 cubic meters of split wood, called "raja" in one shift, enough to send 28 to 30 truckloads to the mill. Also each mill averages about four or five truckloads of "trocitos"—un-split wood of four to 16 inches diameter.

John Jackson, a veteran pine timber producer from Chattanooga, Tenn., has guided the Atenquique woods operations for many months. The progress he made with the Mexican crews is to be judged only in comparison with the almost primitive, hand-cutting and debarking in the woods by Indians which generally still prevails in Mexico.

Mr. Jackson was planning an early return to the U. S., but he has trained an able assistant to carry on as woods superintendent—husky, 28 year old Antonio Sanchez Aldana, who studied civil engineering at Santa Clara University in California and formerly was traffic manager at the Atenquique mill.

As yet, neither the government nor the timber company have any woods fire equipment anywhere in the state of Jalisco. There isn't enough water to do much good. The only way to fight fires is by digging trenches and cutting through



fire trails by hand and with dozers. Trees as well as undergrowth burn in bad fires, because of the steep grades.

The Pulp Mill

The extremely dry weather at Atenquique permits storing of wood in the open for at least six months without danger of deterioration. This is slow-growing pine and there are several varieties in Mexico. Most of it brought into Atenquique is similar to the long leaf pine of southern U. S., although it is very low in resin content and extremely free of knots. It is unusually long-fibered, as previously mentioned, and is easily barked.

A large hydraulic barker and a large-mouthed chipper would pay at this mill. These two units would permit barking and chipping of whole logs, and since there is so much 20 to 30 inch diameter wood being cut for this mill, the economy factor is obvious. Even though the wood is now barked and chipped in 5 ft. 3 inch lengths and 18 inch diameter, about 6 to 8 per cent is lost in this reduction in saw kerf. But there is not enough power available at present for whole log barking and chipping.

A Brown Hoist crane, a Bucyrus Erie crane and Owen orange-peel grapple are equipment in the wood yard. Jeffery conveyors lead to the Carthage all-steel 12 ft. by 40 ft. drum barker and from the barker to an 18-inch Carthage 10-knife chipper. Heppenstall Co. chipper knives are used. These are made in Pittsburgh from special high alloy steel, and they have given excellent service. Elevator and rubber belt carry chips to the steel Chicago Bridge chip silos, each 40 ft. high, and each holding about 6 1/2 cooks.

Only one shift in the wood yard and wood preparation keeps the three shifts in the pulp and paper mills adequately supplied seven days a week. The employees work 48 hours so that shifts are staggered to keep the operations going seven days.

A Jeffery drag conveyor carries chips to the two steel digesters of 7 1/2 tons capacity each by Chicago Bridge, with Horton blow tank.

From blow tank the pulp goes to a Bird Jonsson knotter which is in line with, and followed by, a three-stage Improved Machinery Corp. washing system. Pulp then goes to wash stock storage and then to Impco centrifugal screens, then to Impco thickeners, and then to storage

TOURING ATENQUIQUE MILL with PULP & PAPER'S camera:

1. Size of wood indicated alongside Pulp Mill Sept. Talmadge Bullock.
2. General view—Tanks for pulp washing. High part of building is Pulp Mill—low portion is Paper Mill.
3. Bucyrus Erie crane and Owen orange grapple in wood yard.
4. Jeffery conveyor to barker. 5. Jeffery conveyor into Chip Plant.
6. Carthage all-steel drum barker cleans wood in 5-ft. 3-in. lengths.
7. Top floor of digester house. Digesters are 7 1/2-ton capacity.
8. Water filtration plant. Water is a problem.
9. Close-up of Impco screen driven by Allis-Chalmers motor.
10. Position of same Impco screen in Pulp Mill.
11. Storage tank.
12. Horton blow tank.
13. Westinghouse speed control on pulp washers.

CONTINUING ATENQUIQUE TOUR with PULP & PAPER camera (all interior pictures were taken in natural light with Leica camera — no flashlights used):

1. Bird's Jonsson knotter in unusual position ahead of Impco vacuum washers which makes for better washing.
2. GE motors from 15 to 100 hp., behind Black-Clawson machine. Each has Falk reducer.
3. Another view of motors behind machine.
4. GE turbine generator and MG. sets for machine drive.
5. All switches and panels for comprehensive electronic control of machine are in this 29'x12' room.
6. Shartle jordan with Electric Machinery 350 hp. synchronous motors.
7. Atenquique baker's boy.
8. Home of Mill Mgr. David Kuhe and Mrs. Kuhe. They came from Plymouth, N. C.
9. One end of hotel which still had no clerk, no register, no dining room, etc., when PULP & PAPER editor occupied spacious room with porch at left.
10. Pulp in storage awaiting shipment. Pulp and paper are both made in rolls. Note rolls showing above paper protection at left.
11. One of switch boxes seen in Photo No. 5, with door open.

tank ahead of the paper machine room. Westinghouse speed controls are on the washers. Liquor from the washers goes to storage ahead of the recovery plant. An Impco foam-breaker is also used in the pulp mill.

The arrangement of the knotter ahead of vacuum washers is somewhat unusual. Bird Machine Co. developed this arrangement in connection with the Jonsson knotter screen. The advantage of such procedure is better washing on the filters due to a higher vacuum and also the possibility of installing a press roll on the washer squeezing the black liquor out of the cake. There are a few installations running in the United States and Canada and the first West Coast installation will be in operation very soon.

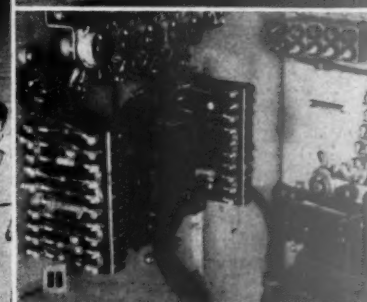
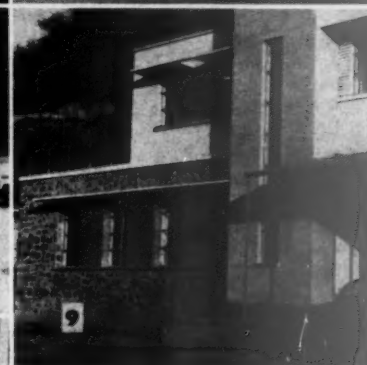
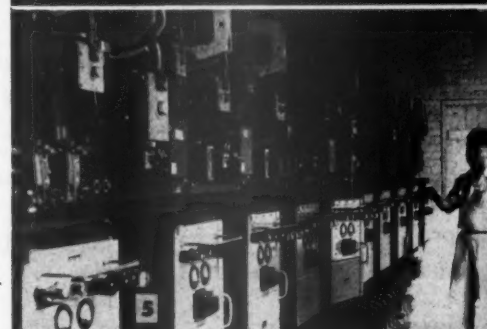
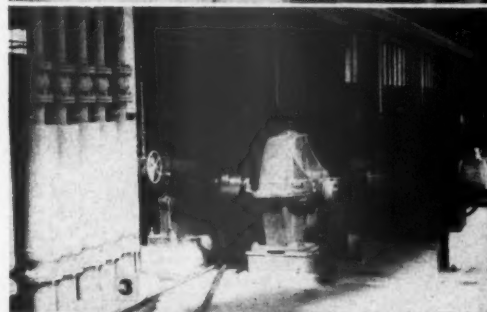
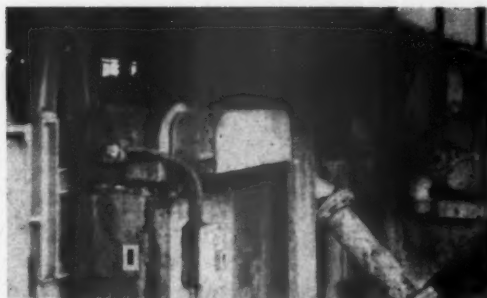
All stock and liquor pumps in Atenquique are Allis-Chalmers with either Allis-Chalmers or Louis-Allis motors. All speed reducers on conveyors, on blow tank, on stock, as well as on the paper machine, likewise come from Milwaukee — from the Falk Corp.

The Paper Mill

A battery of four 350-hp., 2300-volt Electric Machinery Mfg. Co. synchronous motors with high pull-in torque, drive four Shartle jordans in treating pulp ahead of the paper machine. A consistency controller had been ordered, but had not yet arrived. The 120-inch trim machine made by Black-Clawson has a Fourdrinier wire 80 feet long. A Black-Clawson hydromatic inlet and headbox have been installed.

The machine has two Downingtown Mfg. Co. suction presses and 41 dryers in two sections with a one-section J. O. Ross Eng. Corp. hood. At the dry end are two calender stacks, a Pope reel and Cameron No. 118 winder. Bird Vickery doctors are on all the presses and calenders. Dryer section is supplied with Foxboro steam temperature control and Bailey Meter Co. flowmeter on dryer steam consumption. Gould pumps are used throughout the plant for water and a Nash vacuum pump is on the machine.

Appleton and Lindsay wires were generally being used, but occasionally another wire than these has been put on. Felts



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were mainly from Appleton Woolen Mills. The machine has been run at a speed of 1,000 feet per minute on from 30 to 40-lb. stock. The individual sectional electronic control drive—each section with its own motor, but all on one control—is the first ever supplied anywhere in the world for an entire paper machine.

There have been several more installed in the U. S. since this one at Atenquique, and now multiple generator types instead of single generator units are being supplied by General Electric. But the comprehensive electronic control pioneered at Atenquique is still the last word in control equipment.

Back of the machine at Atenquique are ten General Electric motors of 15 to 100 horsepower each (the 100-hp. motors are on couch and calender stack). Each has a Falk reducer and shaft. The motor equipment for each section includes (1) a tachometer or pilot generator; (2) electronic pre-amplifier and (3) Amplidyne, or power, amplifier.

On the front side of the machine is the central master control and also draw rheostat stations. There is an individual stop button and draw control for each motor.

Back of the machine is also the control room for this comprehensive and efficient control system. In a room only 29 ft. long and 12 ft. wide, always locked, is housed the panel boards with all the switches and controls for this machine.

It has only been two years since this first complete electronic control for sec-

tional drives was built. Up to then, electronic controls had only been used for parts of a paper machine.

Water Treatment

Water is the most serious production problem of this mill. The river water has up to 19,000 parts per million of total solids and, on the average, 180 tons of mud and silt are removed daily from it. Nine sugar mills are dumping their effluent into the river water and as a result pH varies from 6.0 to 8.4.

One hour retention time is used in settling tanks and 25 minutes retention time in treating tanks. The water treatment tank area is 80 ft. by 80 ft. with four 20 x 80 compartments. Chemicals are continually being changed for the treatment process, with soda ash, lime and sodium aluminate used in various combinations to obtain the best floc.

In an effort to cut down on the amount of water used in the plant, the Atenquique mill has been successful in saving a large percentage of water through various means. One of these is returning water from jet condensers of the evaporator to the settling tank by aeration by treating chemically. This one method accounts for saving of 2,000 gallons per minute of treated water.

Recovery

A Goslin-Birmingham five-body, quadruple effect, vertical film, long tube type of evaporator is in use at Atenquique. Its inlet capacity is 83,300 lbs. per hour of black liquor at 15% solids and 170 degrees F. It is designed to evaporate 60,600

lbs. per hour of water. Because of the high silica content of the water, capacity can be cut down quite rapidly and frequent cleaning is necessary.

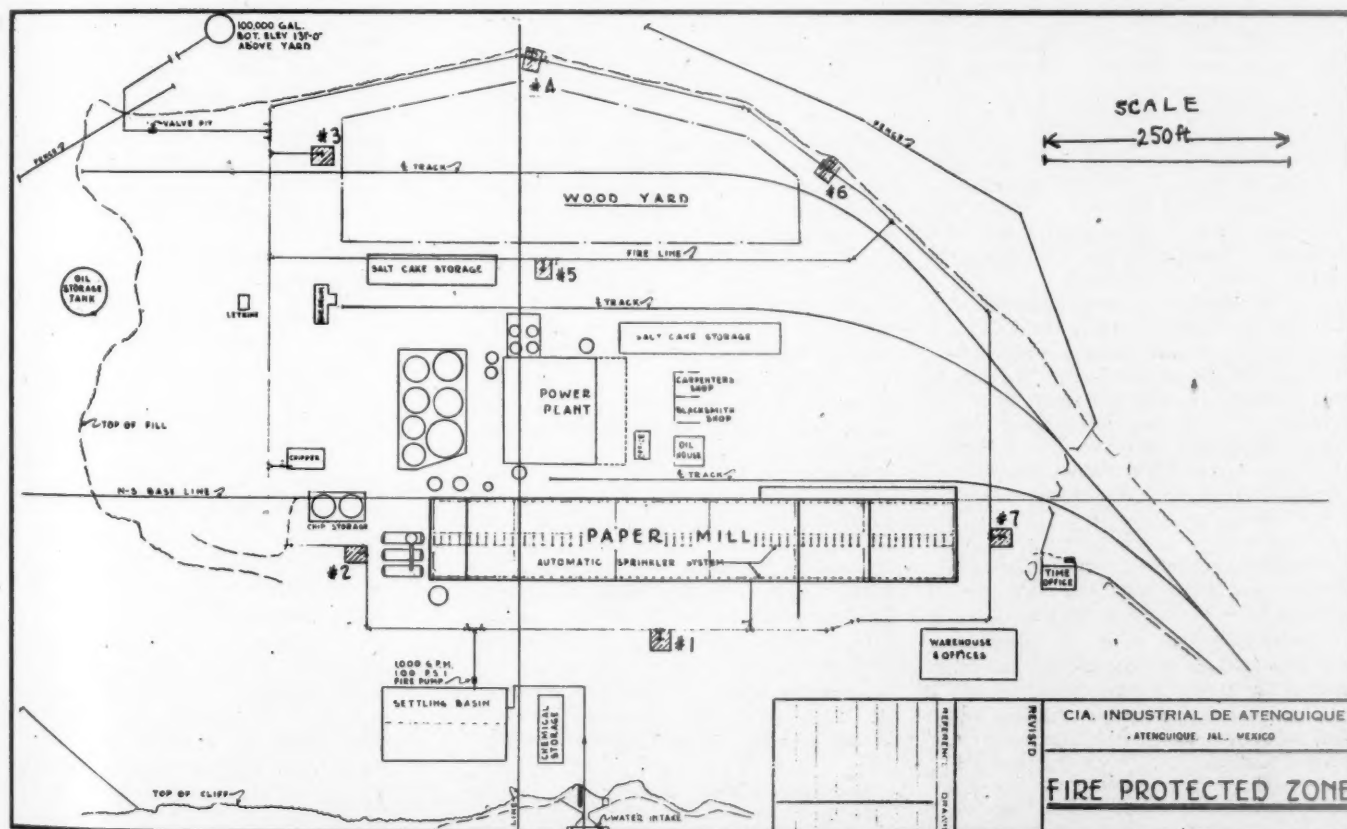
A Combustion recovery boiler with Cascade evaporator is also a major unit of the recovery plant. Boiler specifications are 725 degrees F. maximum temperature, 475 lbs. per sq. in. pressure, and 46,487 lbs. steam average flow per hour. It has capacity for 300,000 lbs. dry solids per 24 hours. The operators have hopes of bettering the black liquor concentration fed to the furnace, with resulting better performance.

All the latest control equipment is installed with Brown, Bailey and Leeds & Northrup controls for the entire recovery operation controlling air, liquor steam and water flows.

General American Transportation Corp. supplied all recausticizing equipment. This includes rotary lime slaker for causticizing, screw type classifier, three causticizing tanks with turbo-agitators and thickeners on white liquor cycle and green liquor.

There is no lime of good quality available near Atenquique. At first it was brought with great difficulty from a point 20 miles away, but it was poorly burnt and high in silica, so that now the mill brings its lime all the way from Torreon in northern Mexico, more than 300 miles distant. It is cheaper in the end, because of its higher purity. It is well burnt. No lime is burnt at Atenquique.

There is one silo for lime storage and



DRAWING OF MEXICO'S ATENQUIQUE MILL. Approximately along the lower border of this drawing flows the Tuxpan River. At the top of the drawing is a high cliff and beyond it a mountain where some of the wood supply comes from.

two for salt cake, each of five railroad carloads capacity.

The salt cake comes principally from American Potash & Chemical Corp., Trona, Calif., being shipped by rail. Smaller amounts come from Salinas de Mexico, a Mexican producer at Salinas in the state of San Luis Potosi.

Soda ash comes from Texcoco Lake near Mexico City, which was the largest lake in the Valley of Mexico at the time of the Spanish Conquest but is now almost entirely dry.

Rosin and alum—other principal chemicals used at Atenquique—are purchased from American Cyanamid Co. in the U. S.

On the subject of recovery, it may be noted that condensate recovery of steam throughout the plant is about 50%. As for fiber, there is presently no saveall in use and it is being considered.

An American Heat Reclaiming Co. unit with one heat exchange and with the usual blow tank hot-water set-up is an interesting part of the recovery picture here. It is designed to handle hot water which it should theoretically get from 100 tons of pulp production.

As for fumes, the Atenquique mill is equipped with a 75-foot high stack, carrying off gases from the Cascade evaporator, and it is fortunately situated in a spot where the towering nearby hills form a natural draft that generally quickly carries away all fumes either up or down the valley. In spite of the fact that the town is built up on hillsides around the mill, there is little odor, except when foggy weather prevails, which is rare.

Power

In the power plant is a Combustion Engineering Corp. VU power boiler with 475 lbs. pressure per sq. in. and 725 degrees total steam temperature and 80,000 lbs. per hour evaporation. Bunker C fuel oil from the Mexican government-owned oil fields at Tampico, or at Minatitlan, both on the Gulf of Mexico, is used. Oil is received through the west coast port of Manzanillo, being transported through Panama Canal.

Leeds & Northrup firing control and Bailey Meter automatic valve controls for steam distribution are all on a single control board in the power plant. The high silica content of water is something of a problem. Hot lime and soda softener and internal treatment of water are helping the situation but there must also be a high percentage of constant blow down for control.

All boiler feed water is treated with Worthington equipment, including de-aerator, and filter with automatic controls and boiler feed water heater.

A Hofft bark burner is now being installed to produce hot air for use in furnaces of the power boiler.

All the electric power for both mill and town is generated by the company. A General Electric 3,500 k.v.a. turbine operates at 8/10 power factor. It has one low pressure automatic extraction for process steam to the paper machine dryers and evaporators and boiler feed.

There is also a 100 k.v.a. emergency



NELSON MYERS (left), sales representative of Texas Gulf Sulphur Co., Inc., New York, and AL RUDDY (right), assistant traffic manager for the same company, teamed up in April in making the first trip for both of them to the Pacific Coast visiting mills from Canada to Southern California. Mr. Myers is a North Carolinian transplanted to New York and Mr. Ruddy is a native New Yorker. Their company does about 20% of its business with pulp and paper mills, but on the Pacific Coast, where it is represented by Pacific Coast Supply Co., its ratio of business in this industry is much higher.

diesel unit, used during shutdowns for lighting and small electrical loads.

The electrical system is 2,200 volts with transformers to bring it down to 220 volts and 440 volts, and also 110 volts for lighting. The main switchboard was supplied by Westinghouse.

The Town of Atenquique

There are 575 employees of the mill and with the 700 woods operations, there are a total of nearly 1,300 persons deriving incomes directly from the new pulp and paper mill.

The brand new town of Atenquique was built in a hurry. It is now gradually being improved. A truly beautiful new church of modern design is being built to replace a temporary structure. This is one feature of any town which the Mexicans would give particular attention. There are stores and a movie theater. There are 150 housing units built terrace-like up the hillsides. These are California-type units—all spread out on one floor with two, three or four apartments adjoining each other in line, each apartment having its separate entrance.

At the top of the hill are the attractive individual homes for the principal executives, with lawns and flowers already thriving. And here, too, is the still unfinished hotel. There haven't been many guests (**PULP & PAPER** was one of the first) and meals haven't been served here as yet. The hotel has a grand view of mountains for many miles around—the highest being the two Mount Colimas—one snowcapped and the other just as high but too hot internally to bide any snow on its dome.

Atenquique still has some serious problems—its wood costs, water and power—but in time they probably will be worked out.

The government already has made lukewarm overtures to sell the mill to a combination of Mexican paper manufacturing companies and converters as a source of supply for them. But it is not

so easy for government officials to let go of a set-up like this.

But whatever the future holds for Atenquique, it looks very much like a place that can be permanently shown on the new maps of Mexico—it has come to stay for better or worse.

DON ALBERTO LENZ, resident and still the active head of the Lenz Mills south of Mexico City—Fabrica de Papel de Loreto y Pena Pobre—was honored guest recently at a fiesta in Cuernavaca, Mexico, on the occasion of his 81st birthday. Sr. Lenz came to Mexico from Germany over fifty years ago.

New York Mills Handicapped in Cold

Mills in the Black River area of Northern New York—in Watertown and Carthage and other nearby points, were handicapped in operations by a long very cold spell during which there were 24 sub-zero days in a 40-day period. One day it was 40 below.

Rail shipments to and from plant were curtailed for two weeks because locomotives couldn't develop enough steam to pull their loads.

Blind Vet Handles Job of Roll Wrapper

An official of the California Rehabilitation Department for the Blind, who is himself blind, tried out several jobs in the Western Waxed Paper Co. plant in Los Angeles and he decided the one most suitable for a sightless veteran is that of wrapping finished rolls.

A former paratrooper who lost his sight at Corregidor, Jesse Castillo, is now doing the job. A Seeing-Eye dog sits under the table and guides Mr. Castillo to washroom or time clock. The blind roll wrapper has the edge of his time card turned down so he can find it without trouble and needs assistance only when making out reports.

Masonite to Build Board Mill in West

Masonite Corp. has announced that it is taking up an option on 50,000 acres of timberland in Northern California and is planning to build a board mill near Ukiah, Calif., in that section of the state.

This company has developed a national business from its plant at Laurel, Miss., and this will be the first operation it has away from the South and is designed to serve West Coast business.

New Name for Mill At Port Huron, Mich.

Dunn Paper Co. is the new name of the 35 tons-a-day machine coated paper, tissue and specialties mill at Port Huron, Mich., which until now has been known as the Dunn Sulphite Paper Co.

In a letter to **PULP & PAPER**, George C. Dunn, executive vice president, advises that hereafter the word "Sulphite" will be stricken from the name. Theodore W. Dunn is president of the company, which operates two Beloit Yankee Fourdriniers.

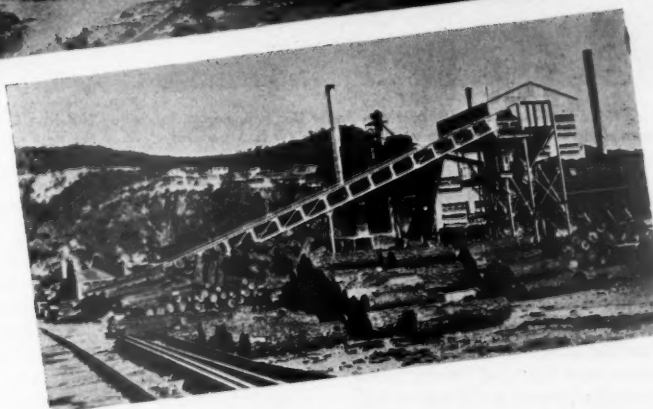


Reg. U. S. Pat. Off.

IN MEXICO

Jeffrey has been privileged to contribute to the speed up process at Atenquique... conveyors handling pulpwood and chips speedily and economically. From now on it's 'Full Speed Ahead' for this modern mill.

Somewhere in the production scheme of most every industrial plant, mine or quarry there is a need for some type of Jeffrey equipment... chains, conveyors, feeders, bucket elevators, locomotives... to hasten material on its way. Also crushers, pulverizers and shredders to help reduce material as well as costs.



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- Pulpwood Conveyors
- Chip Conveyors
- Log Haul-Ups
- Re-Chippers
- Shredders
- Unloaders (barge)
- Feeders (lime, salt cake)
- Crushers (salt cake)
- Elevators (bucket)
- Transmission Machinery

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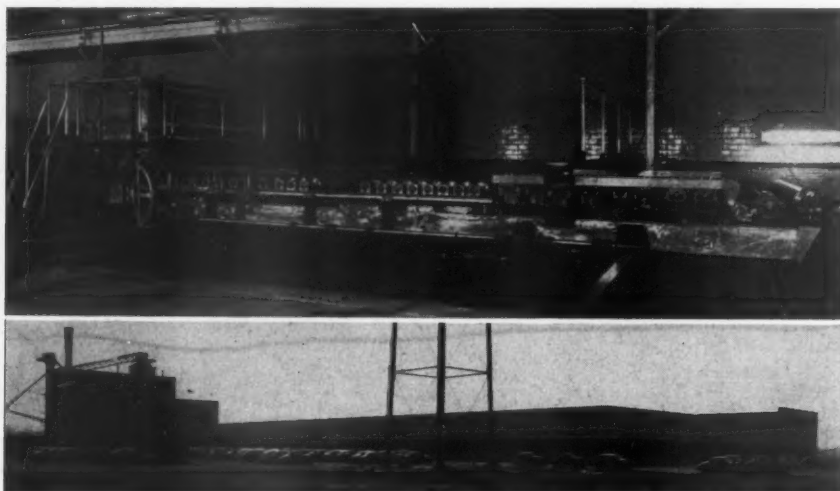
In MONTERREY: J. Dale Reynolds, Apartado No. 428

MATERIAL HANDLING — PROCESSING — MINING EQUIPMENT

MAY, 1948

37

A NEW STREAMLINED MILL FOR American Envelope Co.



BELOIT MACHINE (128-inch) at New Moraine Paper Co. mill, rebuilt by Sandy Hill Iron & Brass Works, with 70 tons daily capacity—twice former rating. Below is a general view of the new mill.

The first fine paper mill built in the United States in approximately 30 years was ready to start up as this issue went to press. A modern, stream-lined windowless plant out on Alexandersville Road at West Carrollton, Ohio, it is known as the Moraine Paper Co. Division of American Envelope Co. and its surrounding community is known as Moraine City.

Miami Valley papermakers of Ohio, where there is one of the greatest concentrations of mills in the world, have been watching with great interest the development of this new addition because of several modern engineering ideas incorporated in its facilities.

All equipment is in continuous line with all operations on one floor at the level of railroad and truck loading, and space was allowed for further expansion, including the addition of an envelope plant. Carlton W. Smith, president of American Envelope Co., laid down these terms at the outset of engineering and construction. And he also specified a mill easy to clean, pleasing to the eye, as well as built to achieve the utmost in efficiency.

The 550 x 330-ft. attractive brick building is simple and is an impressive sight—and the appearance is different than the usual facade of a paper mill. The power house is 50 x 90 ft.

There is room to expand in three directions as the mill is built on ample ground—a total of 87 acres. The site is five miles from the old Miamisburg division of American Envelope Co. which the company no longer operates. The 128-inch Fourdrinier machine from Miamisburg has been rebuilt for Moraine City and has capacity for 70 tons a day of envelope, index bristol and sulfite

ledger, which is just twice its former capacity at Miamisburg.

Perhaps for the first time in this industry, cost production schedule were set up, complete and in detail on a new operation. George A. Ware, cost engineer for the American Paper & Pulp Association, worked with Frederic C. Clark, New York consulting engineer, on the cost plan, modeled to suit the Moraine mill.

It included the planning and ordering

of such equipment as scales, flow meters, automatic record equipment, and recording instruments, and the cost engineering also took into account the human factors involved.

They expect that the Moraine mill will be a perfect combining of modern instrumentation and recording with the human element.

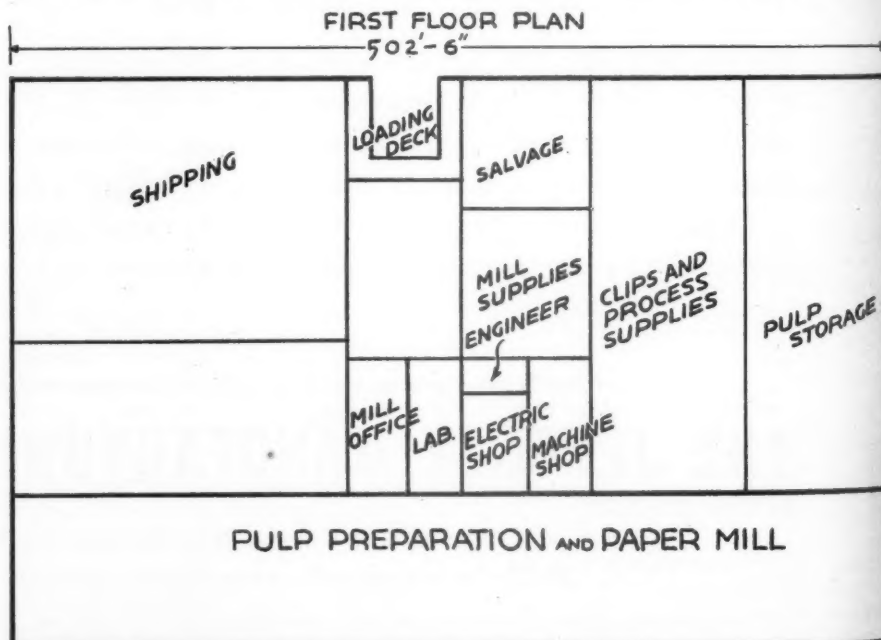
A drawing with this article shows the layout of the paper mill. A railroad track runs along its entire 500-foot east wall. Space is allowed for a second paper machine of 175 inches width.

Shartle-Dilts Stock Preparation

A continuous flow stock preparation system has been provided by Shartle Bros. and its affiliate, Dilts Machine Co. with a 16-ft. Dilts Hydrapulper, broke storage chest, two-tiled cycling chests, two Shartle Hydrafiners, one tile machine chest.

In the stock preparation and paper machine section of the mill there is a 14-ft. basement, and roof tresses are 25 ft. above the main floor. The basement allowed for placing the Shartle-Dilts equipment so that top of the Hydrapulper is only six inches above the main floor level and can be charged from a low conveyor, and chests are only three feet above the main floor. All this is centrally controlled with a board designed by Shartle, Foxboro and Westinghouse.

Two jordans discharge into two Bird Machine Co. screens set on a mezzanine floor in the basement, bringing tops of



THIS DRAWING BY PULP & PAPER shows streamlined layout of the new Moraine Paper Co. Division of American Envelope Co.

the screens to waist height on the main floor, therefore facilitating operation. Stock then goes to a Bertram flow box.

Sandy Hill Iron and Brass Works of Hudson, N. Y., rebuilt the Beloit machine with removable type Fourdrinier. The wire is 132 inches by 80 ft. with ample fin and cylinder table rolls for high speed. A Sandy Hill motor driven dandy roll, suction couch roll, suction first press, plain second and third presses, and smoothing press are ahead of three dryer sections, 2-roll breaker stack, size press 2 calender stacks, English reel and Cameron Machine Co. rewinder. Dryer rolls are 48 inches diameter, 36 in first section with 4 felt dryers, 12 in the second with 2 felt dryers, and 8 in the third section. J. O. Ross Engineering supplied the machine hood and ventilating system.

Sandy Hill provided one of its short center, back line drives on the same floor as the machine, devoid of belting, and capable of speeds up to 1,000 ft. The machine is driven by a 450-hp. Westinghouse turbine.

The machine is 120-inch trim and average production should be 70 tons but on 20-lb. folio it should eventually be capable of up to 100 tons a day.

An unusual feature of equipment are two 12-roll backstands on a turn table. One that can be loaded, while the other is being run-off. After the first set is run off the platform will be turned around so the second back stand will be in the run-off position and the first one in loading position. This saves time in loading paper rolls. A high speed Hamblett cutter and layboy are in production. The finishing room, 100 by 220 ft., is air-conditioned.

In the power plant is a 450-lb. Babcock & Wilcox integral furnace boiler with capacity of 80,000 lbs. of steam per hour. Westinghouse supplied the turbine and generator of 3,000 kw. at 2400 volts and multiple retort stoker. Coal is the boiler fuel used, fed by gravity system.

The mill is designed so the white water system uses a minimum of water and waste of fiber is kept very low.

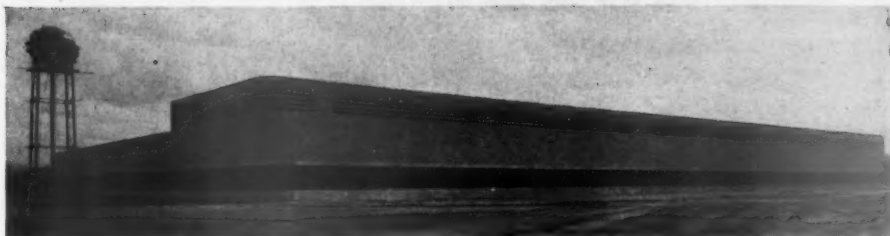
Key Personnel

Key personnel under President Carlton W. Smith are:

Albert E. Smith is first vice president and sales manager of the American Envelope Co.; Horace C. Tracy is second vice president, and Raymond P. Bertschy is secretary.

The general superintendent of Moraine Paper Co. is Herbert A. Brawn, who hails from Bath, Maine, and was graduated from the University of Maine in 1922. He is a younger cousin of Worthen Brawn, who was serving as national president of TAPPI and general superintendent of a Maine mill when he died suddenly while on a trip to Europe last summer. Herbert Brawn had been superintendent at Miamisburg since 1942.

Andrew H. Frazer, former chief engineer of the Miamisburg Paper Co. Division, similarly took on duties of chief engineer of the Moraine Paper Co. division.



ANOTHER GENERAL VIEW OF THE MORaine windowless mill—from opposite side. Actually, this faces the north-west corner of the mill.



FREDERIC C. CLARK (left), Consulting Engineer of New York, formerly of Boston, who was retained by American Envelope Co. in design and construction of the new Moraine Paper Co. mill. GEORGE A. WARE (right), Cost Engineer for the American Paper & Pulp Association, who worked out what is believed to be a unique cost production schedule for this new mill.



HERBERT A. BRAWN, Gen. Supt., has been man on the spot in getting new Moraine Paper Co., at Moraine City, O., started up. He is cousin of late Worthen Brawn, ex-TAPPI President.



C. B. NYMAN, who developed the Swenson Nyman washer, was recently married and made a honeymoon trip to British Columbia where has bought a large orchard and plans to retire. He will be retained by Swenson Evaporator Co. as an occasional consultant.

U. S. Protests Swedish Tax

The State Department has transmitted to the U. S. Embassy in Stockholm, with a request that it be taken up with appropriate Swedish officials, the protest of the Association of Pulp Consumers against Sweden's export tax on wood pulp.

The export tax, known officially as "the business cycle equalization charge," has been assessed since early last year on the basis of 50 Swedish kroner (\$14.00) per metric ton of chemical wood pulp exported. The charges are being accumulated in a fund which, at least in theory, is to be distributed to the Swedish pulp manufacturers, in three yearly instalments, starting in 1951.

The official protest of the Pulp Consumers followed statements made in person at Washington by Karl A. Clauson, secretary of the group who is now in Europe in the interests of member mills. In a letter to the State Department, Mr. Hugo Hanson, president of Pulp Consumers, speaking for 286 member mills, advocated elimination of the tax for several reasons. Among them: it appears inconsistent with the spirit of ERP, because its attempts to reduce Sweden's internal inflation at the expense of her two biggest customers, England, the U. S.; and, secondly, the price of Swedish pulp is very high in relation to paper prices and at the point where mills dependent on it have had to curtail operations. The protest suggested further that the Swedish industry itself "is not in sympathy with the assessment by their government."

Early in April the Pulp Consumers received word from the State's division of Commercial Policy that the protest had been transmitted through the Embassy in Stockholm.

The industry receives in excess of 500,000 tons of Swedish wood pulp per year. The additional tax adds \$14.00 per ton to prices already from \$25.00 to \$40.00 above domestic levels, the Pulp Consumers point out.

Jones High Speed Refiner At New Hampshire Mill

Ashland Paper Mills Inc., Ashland, New Hampshire, which manufactures tissue papers, has installed an E. D. Jones & Sons Co. high-speed refiner as a final stock preparation unit directly ahead of the paper machine. The unit is powered by a 75-HP., 1200-RPM, direct connected motor.

Paper Lost in Storm

A paper barge southbound from Pacific Mills, Ocean Falls, B. C., was lost in snow and gales, but finally was found 15 feet under water but still afloat by searching planes. It was towed back to the mill, with its hold a mess of soaked and bursted paper rolls.

STANDARD PAPER BOX CORP. of Los Angeles began operations at its new Longview, Wash., plant April 1. Raymond T. Miller, vice president, was named general manager of the Longview plant. Modern high speed glueing and other equipment is being added to existing paper box machinery.

PAY BOOST ON COAST



The annual wage conference in Portland, Ore., between the Pacific Coast Association of Pulp and Paper Manufacturers and two AFL unions ended April 18 with agreement on a 15-cent minimum increase for all men employees, with a 9% overall increase. This brought the men's base rate to \$1.42½ and the women's base rate to \$1.16½ an hour.

As usual, results must be confirmed in union meetings at the 32 member mills in Pacific Coast states and this confirmation always has been forthcoming in the past.

Under the agreement, 15,000 employees receive annual wage increases totaling five million dollars. Total increases since V-J Day are \$18,200,000.

The unions were also granted a union shop. As a condition of employment all new employees hired after June 1, 1948, must become members of one of the signatory unions after 30 days. Up to now the mills have operated under a maintenance of membership clause.

Employees agreed to make all reasonable arrangements necessary to permit all employees time from work in order to vote on general election day.

TAPPI President Will Attend GEARHART MEETING

TAPPI National President Wilbur F. Gillespie, technical director at Gaylord Container Corp., Bogalusa, La., will be a guest of honor at the Joint Spring Meeting of the Pacific Coast TAPPI and Superintendents groups at Gearhart, Ore., Pacific Coast beach resort, on May 6-8.

Dr. Walter F. Holzer, of Crown Zellerbach's Central Technical and Research

Dept., Camas, Wash., is general convention chairman. He expects a number of prominent eastern industry leaders will attend the sessions.

Registration begins at 3 p.m. Thursday, May 6. That evening there will be a buffet supper, dances on Friday and Saturday. Ladies' golf, tea and bridge and men's golf are scheduled.

AT LEFT IS GENERAL VIEW of the 14th annual industry-wide collective bargaining Wage Conference which ended in Portland, Ore., April 18 with a 9% wage boost for 15,000 employees of 32 Wash.-Ore.-Calif. pulp and paper mills. See North American Review Number for another picture.

AFL union delegates are seated at left side of table and bargaining committee for Pacific Coast Association of Pulp & Paper Manufacturers are at right side. At far end are Co-Chairman John Sherman (left) for unions, and J. D. Zellerbach (right) for management.

On right side around the table (seated in order in this direction from Mr. Zellerbach) are:

A. R. Heron and J. E. Hanny, Crown Zellerbach Corp.; a woman reporter; Lawson Turcotte, Puget Sound Pulp & Timber Co.; Howard Morgan, Weyerhaeuser Timber Co., Pulp Division; J. W. Genuit, Fernstrom Paper Mills, Inc.; L. S. Burdon, Soundview Pulp Co.; F. J. Herb, Pacific Coast Paper Mills; Irving T. Rau, St. Helens Pulp & Paper Co.; R. S. Wertheimer, Longview Fibre Co. (elbow on table); W. E. Breitenbach, Rayonier, Inc.; H. L. Wollenberg, president of Longview Fibre Co.; R. E. Bundy, Fibreboard Products, Inc. (arm on table); Lyall Tracy, Rayonier, Inc., and A. B. Moody, Everett Pulp and Paper Co.

Starting again at far end of table, to left from Mr. Sherman, vice president of Pulp Sulfite and Paper Mill Workers, are: A. E. Brown, vice president, Paper Makers; I. D. Isaacson, vice president, Pulp, Sulfite and Paper Mill Workers; Arthur Hannaford, W. E. Riggs and Oren Parker, international representatives of Pulp, Sulfite and Paper Mill Workers; Norman Tracy, international representative of Paper Makers; John Dawson, PSPMW, Hoquiam, Wash.; C. J. Reikenberg, PSPMW, Los Angeles; Harry Adair, Paper Makers, Los Angeles; Richard Boyle, PM, Sumner, Wash.; Roy Bradford, PSPMW, Longview, Wash.; Don A. Phelps, PM, Lebanon, Ore.; Irvin Lavier, PSPMW, West Linn, Ore.; and Richard G. Hoover, PM, West Linn.

The technical program is headed by Harold Wall, Longview Fibre Co., and Gus Ostenson, C-Z, Camas; entertainment by Ray Smythe, Rice Barton Corp. and Heppenstall Co.; publicity by Carl Fahlstrom, Longview Fibre Co.

Rooms and reservations are handled by Milton Maguire of Hercules Powder Co., Portland, Ore., and Ben Natwick, Appleton Wire Works, Camas, Wash.; golf by Dan Keating of Stauffer Chemical Co., and Jack Wilcox of Electric Steel Foundry Co.; ladies' events by John Fulton of Pacific Coast Supply Co.; food by Z. A. Wise of Griffith Rubber Mills, and finances by Roy Shaneman of Penn Salt Mfg. Co. of Washington.

R. M. True, General Dyestuff Corp., secretary of Coast TAPPI, and Fred Armbruster, Dow Chemical Co., secretary of Coast Superintendents, are assisting in general arrangements. Room reservations should be made as soon as possible, and only through Mr. Maguire or Mr. Natwick.

Turcotte New President

Lawson P. Turcotte, executive vice president of Puget Sound Pulp & Timber Co., has been elected new president of the Pacific Coast Association of Pulp and Paper Manufacturers, organization of more than 40 mills in three Coast states.

He succeeds John H. Smith, retired president of Hawley Pulp & Paper Co., who had sold out his holdings when that mill was sold to Publishers Paper Co., and the Blyth Co., as we reported in **PULP & PAPER** last month. Norman Chandler, Los Angeles Times; F. W. Leadbetter, Oregon Pulp & Paper Co., and A. E. Bowen, Salt Lake City Desert News, and H. M. Youell, Portland, are principal officers of the Publishers Paper Co.



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A Progress Report ON NATIONAL CONTAINER MILLS

National Container Corp. continues to make steady progress on its several million dollar improvement program, **PULP & PAPER** was told recently by W. T. Webster, assistant general manager whose headquarters are at Jacksonville, Fla. Samuel Kipnis, of New York, is president and R. H. Laftman is vice president and general manager, and A. H. Edwards is a vice president, and the company has mills at Jacksonville, Tomahawk, Wis.; Big Island, Va., and Ontonagon, Mich.

At Jacksonville four additional 8 x 12 Impco washers are being installed in a new building designed also to include the present washer equipment. The Florida mill broke its production record four times during the month of March, hitting a high of 368 tons which tumbled the previous record of 346 tons.

Mr. Webster announced the appointment of Melvin J. Farris as pulp superintendent. Mr. Farris came to National at Jacksonville from Southland's big operations at Lufkin, Texas.

"Judge" William Cary is production manager, W. C. Hayes, paper superintendent; R. H. Stevens, technical director; and B. H. Buck, chief engineer at Jacksonville.

National Container Corp. of Virginia, with its mill at Big Island, Va., has completed its new semi-chemical plant which includes Paper and Industrial Appliances and American Defibrator equipment, and is now working on nine point corrugating only to the tune of 150 tons daily. Also, two Impco washers have been installed as part of a general improvement program. Mr. Stewart Crawford of Franklin, Va., has been retained by National as consultant on steam improvement and is said to be having excellent results in this work in his area.

A. C. Taylor is general superintendent, and E. Stuart Camden is resident agent and purchasing agent at Big Island.

National Container of Wisconsin at Tomahawk, Wis., is installing a semi-chemical plant similar to the Big Island installation and including three Impco washers. Tidewater Construction Co. of Norfolk, Va., is the general contractor for a new box plant in a 700-foot building erected at a cost of approximately \$350,000.

The box plant was officially opened April 15 with a dance for all employees and their families at the invitation of C. G. MacLaren, vice president and general manager. Included also in the Tomahawk improvements is a high pressure Babcock & Wilcox power boiler, new coal handling equipment, a 5000 kw General Electric turbine generator, and a Carthage chipper.

Under the direction of "Cap" Youngchild of Appleton, Wis., the paper machine drives and dryers are being re-



RICHARD H. LAFTMAN, left, Vice President and General Manager of National Container Corp. Right: WILLIAM T. WEBSTER, Assistant General Manager of the organization, with offices in Jacksonville, Fla.

vamped at Tomahawk. Ross hoods and air systems are being installed on all machines. Power plant work is being handled by Helmick, Edeskuty and Lutz, power plant consulting engineers of Minneapolis. The new Swenson evaporators have been completed at Tomahawk.

Mr. MacLaren, mentioned above, is top executive here.

C. E. Stokes is pulp mill superintendent, George Riedel, paper superintendent; Waldemar Nielson, chief engineer; and O. F. Duus, purchasing agent at Tomahawk.

Mr. Webster pointed out that almost all the National program leads into two related directions: Stream improvement, and getting more fibers per unit of wood.

Other principal officers of National Container's central organization are Harry Ginsberg, chairman or vice president and treasurer in the various company units; Marshall Bernstein, secretary.

Newton Cuneo is vice president and

M. E. FARRIS, who is the new Pulp Mill Supt. at National Container Corp., Jacksonville, Fla. He moved there from the Southland Paper Mills of Lufkin, Texas



general manager of National Container Corp. of Michigan at Ontonagon, with A. T. Yoder, paper superintendent; J. F. Voss, superintendent of maintenance, and J. Heard, chief chemist.

Celanese May Convert Pulp At Prince Rupert Mill

During a recent speech in the British Columbia legislature, Hon. E. T. Kenney, minister of lands and forests, stated that an official of Celanese Corp. of Canada had intimated to him that the company might establish near Prince Rupert, B. C., a mill for further processing of cellulose as well as the high grade sulfite mill already definitely planned for that area. Site of the pulp mill is cleared and ready for construction.

Mr. Kenney indicated that the company's decision rested largely with the possibility of piping natural gas to Prince Rupert from the Peace River at reasonable cost.

Celanese Corp. is a principal producer of cellulose acetate yarn and staple fiber for textile and plastics. It also produces viscose process yarn.

Pulpmen's Tournament

The annual tournament of the New York Pulpmen's Golf Association will be held June 8th at the Winged Foot Golf Club, according to Donald Fraser, secretary-treasurer. Roger Egan is president of the club.

New Name for Hotel

The Park-American Hotel of Kalamazoo, where many a paper industry executive or salesman has pillowed his head, is no more. Hereafter it will be known as the Harris Hotel.

Harry L. Harris, president and manager since last September, said improvements are continuing, with 80 of the 180 rooms already redecorated and refurnished.

INTERESTING NEWS for traveling men in this industry is that the Burdick Hotel in Kalamazoo, Mich., has been taken over under lease by International Hotel Co. of Detroit and New York. This is the second hotel in Kalamazoo to change hands, which probably means some changes in accommodations and facilities offered travelers.

ERIK FERNSTROM, president of Fernstrom Paper Mills, Pomona, Calif., made a trip this past winter by steamship to Sweden. He stayed in Manhattan a few days before returning to the west and in an interview stated that "the best answer to the paper shortage is the collection of waste paper. But," said he, "the supply will not be increased to any extent unless new mills are opened in Canada and Alaska."



COOKING WITH PAPER

(NEWS ITEM: Cooking meals in paper eliminates unpleasant cooking odors and makes food richer, more healthful and more delicious.)

Fastidious homemakers, particularly apartment dwellers, welcome the modern method of cooking that does away with cooking odors and makes meals more delicious. The secret is parchment paper. Food is prepared and placed in the center of a moistened sheet of paper. Corners are gathered and tied to form a bag. Contents are cooked as usual—minus telltale odors of cabbage, onions, fish, etc. Two-burner stove users can cook two or three separately wrapped foods in the same pan of water. Manufacturer's name on request.

Paper clotheslines . . . paper bags to package ice . . . polishing paper for silver . . . new uses for paper calling for new standards of lightness and toughness, new standards of quality in performance. New responsibilities—new opportunities for the Pulp and Paper Industry.

The Pusey Jones Organization is now devoting itself completely to the design and construction of Paper-Making Machinery built to new high standards of speed and efficiency, and to the modernization of existing machines. Additional capacity in Metals Fabrication is now available through conversion of facilities formerly devoted to the building of ships.

Pusey Jones Engineers will welcome the opportunity to work with you in solving production problems.

THE PUSEY AND JONES CORPORATION
Established 1848. Builders of Paper-Making Machinery
Wilmington 99, Delaware, U. S. A.



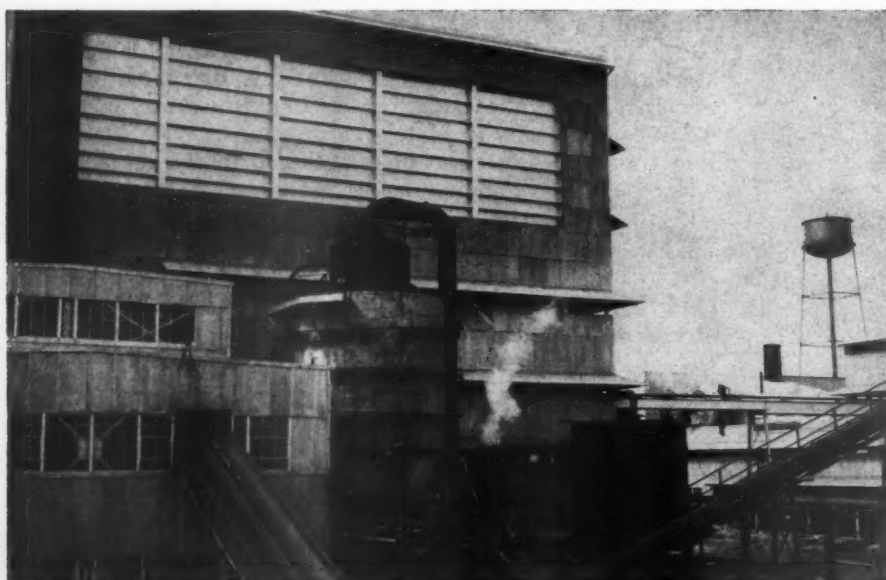
TOP EXECUTIVES NAMED FOR Two Pensacola Mills



OFFICIALS of Florida Pulp & Paper Co. and Alabama Pulp & Paper Co., l. to r.: RUSSELL G. SEIP, Chief Engineer of both mills; KARL R. KARLSON, Plant Manager of both mills; WILBUR L. ORR, Pulp Mill Supt. of Florida Pulp & Paper; JOE BRUFFY, Technical Supt., Florida Pulp & Paper; G. T. WEGNER, Ass't Secretary for both mills; DAVE E. JONES, Paper Mill Supt., Alabama Pulp & Paper.



OFFICIALS OF ST. REGIS affiliate mills, l. to r.: C. W. BODNER, Manager, Alabama P&P, multi-wall bag plant; J. A. HARRISON, Pulp Mill Supt., Alabama P&P; U. J. WESTBROOK, Asst. Plant Manager for both mills; HAROLD MACKLEM, Asst. Chief Engineer of both mills; M. C. GALPERN, Comptroller for Florida P&P; HERMAN HABERLE, Manager of St. Regis bag plant, New Orleans.



THE THRILLING MOMENT at new Alabama Pulp & Paper Co., photographed by Pulp & Paper. Steam shows for the first digester blow on March 11. Mill inspection by directors followed on Apr. 15-17.

JAMES H. ALLEN, President and General Manager of both the Alabama Pulp and Paper Co., and the Florida Pulp and Paper Co., at Cantonment, Fla.



The newly constructed kraft paper mill of the Alabama Pulp and Paper Co. at Cantonment, Fla., 17 miles north of Pensacola, blew its first digester cook on Mar. 11, went into production shortly thereafter, and was scheduled for formal inspection by directors and officers of St. Regis Paper Co. on April 15-17.

The new mill is across the company road from its companion plant of Florida Pulp & Paper Co. The two mills together will have a combined capacity of 400 tons or more per day.

Construction crews were on the grounds to start work on the new mill in November, 1946. In addition to the paper and pulp production, the facilities include a multi-wall bag plant.



The paper machine is by Black-Clawson; machine drive and controls, Westinghouse; calender, Farrel-Birmingham; re-winder, Cameron. Other furnishers of major equipment include: Improved Paper Machine Corp., Babcock & Wilcox, The Dorr Co., and Shartle Company.


Digesters for the new mill were furnished by Chicago Bridge & Iron Co.; barking drums by Fibre Making Process; chippers, D. J. Murray Mfg. Co.; chip crusher from Waterville Iron Works; wood room screens by Link Belt Company.


The executive and supervisory personnel of the two companies at the mill site (both are St. Regis Paper Co. owned) include the following for both mills:

Chairman of the board, Roy K. Ferguson; president and general manager, James H. Allen; executive vice president and treasurer, A. D. Pace; executive vice president and secretary, J. C. Pace; executive vice president in charge of traffic, Henry Hilton-Green.



Vice president in charge of production and purchasing, George M. Snyder; director and assistant to president, Robert H. Allen; assistant secretary, G. T. Wegner; chief engineer, Russell G. Seip; assistant chief engineer, Harold G. Mack-

You wouldn't drive with your brakes  on... or would you? 


Why brake your cylinders with a seal  that drags? It's really



tough  on the felts because they deserve a longer and fuller

life. It's easier on your pocketbook  and your disposition

 if you adopt the Cheney Bigelow cylinder seal. 

This new type seal eliminates the braking  action

of the usual felt seal, eases the pull  on the felt, reduces

stretch  and helps keep the felt open  It saves


washing-up time  because you just loosen and

wash  out, and it makes frequent replacements a thing

of the past 

Write for full information  about this new way 

to get longer felt life. Cheney Bigelow  Wire Works,

817 Liberty Street, Springfield,  Mass.

CHENEY BIGELOW

Pulp and Paper Mill Equipment

Fourdrinier Wires

Dandys

Cylinders

Wire Cloth

lem; civil engineer, D. C. Arnold.

Plant manager, Karl R. Karlson; assistant plant manager, U. J. Westbrook; chief operating mechanical and electrical engineer, A. O. Mortenson; assistant, Eddie Durbin; superintendent of power and steam, O. H. Ware, and superintendent of finishing, J. E. Wilson.

At the new Alabama mill J. A. Harrison has been named pulp mill superintendent; Dave E. Jones, paper mill superintendent; Rafor Clement, power house superintendent; and Leon Gibson, superintendent of technical service.

At Florida Pulp & Paper mill, Wilbur L. Orr has been named pulp mill superintendent; A. F. Downey remains paper mill superintendent; Joe Bruffy remains superintendent of technical service; C. C. Campbell remains assistant paper mill superintendent; and R. G. Cohn was named bleach plant superintendent. No other changes were announced.



SOUTH

FRED KRUSE, superintendent of the paper mill at Chesapeake Corp. of Virginia, West Point, Va., retired from that post April 1 after passing his 65th birthday on Mar. 12. He was superintendent at West Point for 18 years, helping to raise its production from 100 to 400 tons per day. Born in Portland, Wis., he formerly worked in Wisconsin, Vermont, New York and Oregon mills.

HARRY REICK has been appointed superintendent at West Point to succeed Mr. Kruse.

WAYNE LINDGREN, of P. O. Box 1082, Savannah, Ga., has been appointed representative in the entire Southern territory for Pacific Car & Foundry Co., Seattle, manufacturers of tractors and pulpwood transport equipment, some of which already is in use in Southern pulpwood operations.

JOSEPH T. O'NEILL has been appointed Stein, Hall & Co.'s sales representative for Texas. Mr. O'Neill, who was previously connected with the New York office of Stein-Hall, will make his headquarters in New Orleans, at the Stein-Hall office in that city, 413 Pere Marquette Bldg.

L. A. THOMPSON, who for many years served the southern pulp and paper mills for Hercules Powder Co. out of New Orleans, has been transferred to Atlanta for his new headquarters, which are located at 415 Rhodes-Haverty Bldg., 134 Peachtree St., NW.

WILLIAM M. OETTMEIER, general manager of the Superior Pine Products Company, Fargo, Ga. was re-elected president of the Forest Farmers Association Cooperative at the annual forestry conference held in Jackson, Miss., on Feb. 18-19.



GEORGE HARDAKER, representative of Lockport Felt Co. of Newfane, N.Y., throughout the South, has recently moved into his territory and his new address is Haw Creek Road, Route No. 2, Asheville, N. C. Mr. Hardaker formerly lived in Holyoke, Mass.

There's Always Something Doing in the South

There's always something doing in the South March and April were crowded with events of significance to the industry. For instance:

On Mar. 11, Alabama Pulp & Paper Co., Pensacola (Cantonment, Fla.), blew its first digester.

On Mar. 22, the contract was let for the Coosa River Newsprint mill—joint Kimberly Clark and Southern Newspaper Publishers in Alabama.

On Mar. 31, the new paper machine started up at Southland Paper Mills in Lufkin, Tex. Company and other executives viewed the big machine on Apr. 5.

On Apr. 7, Southern Pine Ass'n. annual meeting in New Orleans featured a session on forest radio.

Apr. 15-17—St. Regis Paper Co. directors visited the new subsidiary, Alabama Pulp & Paper Co.

Apr. 28—Meeting of southern members, National Stream Improvement Council at Edgewater Park, Miss.

May 18-20—American Pulp & Paper Superintendents' convention in New Orleans.

May 20—Formal opening of Armstrong Cork's new plant in Macon, Ga.

JERRY FRASER has been appointed purchasing agent of Southern Advance Bag & Paper Co., Inc., at Hodge, Louisiana. He succeeded the late J. A. Lintott.

A. S. BEDELL was elected chairman of the executive committee of J. E. Serrine Co., engineering firm of Greenville, S. C.

DR. CHARLES H. CARPENTER who was formerly general superintendent of Southland Paper Mills, Inc., was a recent East Texas visitor. Dr. Carpenter became associated in April 1947 with the New York and Pennsylvania Co., Lockhaven, Penn.

E. T. CUDEBACK, who serviced the pulp and paper field for Allis Chalmers Mfg. Company out of the Atlanta (Ga.) regional office, was named manager of that company's Tampa, Fla., district which includes the pulp and paper mills in Florida. Mr. Cuddeback joined the Allis-Chalmers company following his war service.

C. H. LANGSTEN has been promoted from tour boss to shift superintendent at Sonoco Products Co., Hartsville, S. C. Murphy Langston was promoted from No. 1 machine tender to tour boss.

Largest Producer Paper Milk Containers

Operation of the Single Service Container Division of International Paper Co., Bastrop, La., now rates as the world's largest producer of paper milk containers. The plant, a 120 by 150 foot structure adjacent to the "Louisiana" mill of IP, consumes daily 43 tons of bleached sulfate paper. Its production has ranged from 27 million to 42 million milk containers per day, producing an average of 30 million.

IP operates plants in Norristown, Penn., and Kalamazoo, Mich., but the Bastrop plant produces 2/3rds of the current market supply. IP officials believe that within five years 85% of all milk will be sold in paper containers. The Bastrop plant was started in March, 1947. It has five machines producing 800 containers per minute. The containers are produced under license from the Ex-Cell-O Corp., Detroit, Mich.

Waste paper amounting to not over 1½% is returned to the paper mill for re-use.

Wood Supply Improves in Southeast

A break in the wet weather along the Southeast coast improved the wood supply situation late in March after a prolonged period of unusual precipitation which slowed up woodlands operations. Several coast mills got dangerously near the zero point on wood inventory and there was some borrowing. In some areas there have been almost daily heavy rains since December, particularly in western Georgia and Florida.

BUSINESS OFFICE operations of Chapman Chemical Co. will be consolidated at Memphis, Tenn., beginning March 1. The present offices will be continued as bases of operation by the sales force. The company's Memphis plant is at Brooks Road and Illinois Central Railroad crossing, Mallory Station.

PAUL E HAUSMANN, who resided at Nicholson, Pa., and was representative in the South for Noble & Wood Machine Co., died March 3.

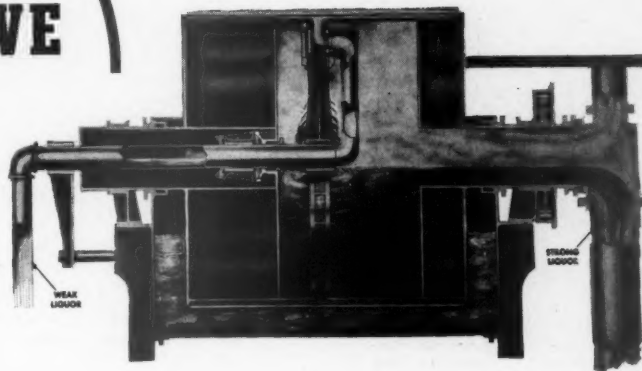
FORMERLY OPERATED as a subsidiary under the name of Southwest Building Products Co., the felt products plant at Dallas, Texas, of the Certainteed Products Co. is now under the name of the parent corporation. J. E. Tittsworth is plant manager; John Norvicki, production superintendent; H. R. Lee, office manager; and D. W. Martin, purchasing agent. Production began May 15, 1946.

J. A. KING has been named by Allis-Chalmers Mfg. Company to service the pulp and paper mills for the Atlanta (Ga.) district. Mr. King is a graduate of Alabama Polytechnic Institute, Auburn, Ala. He served in the production division of Allis-Chalmers prior to war service in the Air Corps. Following his release from service, he was at the Milwaukee plant prior to assignment to the Atlanta office.

**...VERSATILE in its
Usefulness!**

OLIVER

**RINGVALVE
FILTER**



We recommend the Oliver Ringvalve Filter for the following applications:

- ➔ **Sulphite, Sulphate or Soda Washing**
- ➔ **Bleach Washing**
- ➔ **Decker-Washing**
- ➔ **Deckering**
- ➔ **High Density Thickening**

We recommend its purchase for your mill not only because it has thoroughly proved its superiority but because it's not a "cramped" filter. There is plenty of space between drum and vat for pulp circulation. The vat is designed for "through the floor" installation.

And as a reminder of its operating features here are a few: wide submergence range; operable with barometric leg; low flow resistance; can take peak loads in stride; uniform sheet and high washing efficiency.

Yes, we recommend the Oliver Ringvalve for any of the operations noted above. Many mills are glad, today, they accepted our Ringvalve recommendations.

OLIVER UNITED FILTERS



INC.

New York 18, N. Y.
33 West 42nd Street

San Francisco 11,
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Chicago 1, Ill.
221 N. LaSalle Street

Western Sales Division
Oakland 1, California
2900 Glascock Street

Sales and Manufacturing Representative:
E. Long Limited
Orillia, Canada

Factories: Oakland, Calif. • Hazleton, Pa. • Orillia, Canada • Melbourne, Australia

MAY, 1948

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Personals

MIDDLE WEST



STEVE BAISCH, whose appointment as Design Engineer in charge of the Engineering Dept., Thilmany Pulp & Paper Co., Kaukauna, Wis., is announced by Charles R. Seaborne, Vice Pres. in charge of Manuf. Mr. Baisch has been with Thilmany since graduating from U. of Wisconsin except for period in Army Ordnance, with action in Africa and Sicily. In army, he designed facilities for renovating ammunition and adapting foreign munitions to American weapons.

ART BELLINGHAUSEN, technical department superintendent, and George Gerritts, technical foreman, of the Kimberly, Wis., mill of Kimberly-Clark, and other members of the Kimberly technical department were feted recently for a 30-year no-lost-time accident record, the best such record for any of the industrial department of the K-C mills.

ART PARKER, who was acting mill manager at Kimberly, Wis., at the time of the party, owing to absence on vacation of J. T. Doerfler, and Glen Strieby, now technical director at the Neenah, Wis., mill, and formerly at Kimberly, were among those congratulating the Kimberly department.

OFFICERS OF MICHIGAN DIVISION OF SUPERINTENDENT ASSN. (left to right): W. F. Hathaway, Kalamazoo Vegetable Parchment Co., Second Vice Chairman; Olin W. Collighan, Edgar Brothers Co., Secretary-Treasurer; William H. Astle, Michigan Paper Co., Chairman; H. B. Johnston, Allied Paper Mills, First Vice Chairman.



MARSHALL KNUDSON (seated), Master Mechanic at Minnesota & Ontario Paper Co.'s big mill at International Falls, Minn., is shown here with a 12-pound wall-eye pike which won first prize of \$25 in the M & O's fish derby, an annual event in the lake country on the international border.

Standing at right, hand raised in a gesture of admiration, is **CLARENCE NELSON**, General Manager of the International Falls varied operations. The other trio, from left, are **GUY LYMAN**, **OSCAR SANDSTROM** and **LES GRAHAM**. Mr. Knudson's friends surprised him by secretly having his fish mounted and it was presented to him at a Foremen's meeting.

W. H. SWANSON, co-chief of staff of Kimberly-Clark Corp., Neenah, Wis., served on the committee arranging the Fox River Valley Boy Scout council banquet last month, where Dr. Nathan M. Pusey of Lawrence College was principal speaker.

RALPH A. HAYWARD, president of Kalamazoo Vegetable Parchment Co., Parchment, Mich., was selected to speak for all industries of the state of Michigan at a meeting in Washington, D. C., Apr. 26 of Michigan's congressional delegation, state and industry leaders.

FRANCIS BAETEN, finishing room foreman at Thilmany Pulp & Paper Co., Kaukauna, Wis., goes in for farming in a substantial way with a half acre of ground under personal cultivation by him. He's a Quarter Century Club member, having started as fifth hand on No. 1 machine.

JOHN FORBES, former chief engineer of the Sutherland board mill division of Sutherland Paper Co., Kalamazoo, Mich., died Mar. 2 at the age of 88.

DONALD W. DAVIS, director of research for U. S. operations, Marathon Corp., and **J. B. CATLIN**, assistant technical director, Kimberly-Clark Corp., were featured speakers at an American Chemical Society meeting in Appleton, Wis.

WILLIAM A. EITING, millwright at the Kimberly, Wis., mill of K-C Corp., was honored by a farewell party when he retired recently after 32 years service, with **J. T. DOERFLER**, mill manager, and **RON EVANS**, plant engineer, making short talks.

CHARLES SEABORNE, Jr., son of Vice President Seaborne, joined Thilmany Pulp & Paper Co. last year and recently transferred to the sulfate office of the mill. Charles, Jr., is married and they have two children. They live at 66 Bellaire Court, Appleton. One daughter was born last Dec. 21 and the other is three years old.

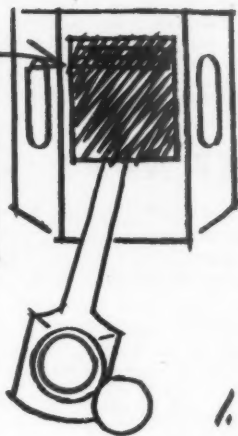
W. R. KELLETT, general superintendent and assistant vice president of Kimberly-Clark Corp., talked on "Management and Safety" in launching a recent in-plant industrial health clinic at the Lakeview mill of that company in Neenah, Wis., sponsored by county medical societies. **JOHN WOLLWAGE**, mill manager, and **AL JOHNSON**, chief safety engineer of all K-C mills were among speakers.

LUBE MEMO

Crankcase Sludge causes Hot Lube Oil troubles

Hot oil oxidizes fast, gums pistons

Sludge formed by ordinary lube oil insulates crankcase, keeps oil hot



Foreman says try RPM DELO Diesel Engine Lubricating Oil — its compounds stop sludging 3 ways:

- 1. Oil oxidation slowed up*
- 2. Gum and lacquer cleared out.*
- 3. Contaminants held in suspension — flushed out when oil is changed.*



Tell foreman OK to order RPM DELO Oil

STANDARD OF CALIFORNIA



CHARLES LUKENS HUSTON, JR., appointed Vice-Pres. Lukens Steel Co., Coatesville, Pa., according to Robert W. Walcott, Pres. Mr. Huston joined Lukens in 1939 as Dir. of Personnel Relations. He is also Pres. and Gen. Mgr. of Lukenweld, a division of Lukens Steel Co. of particular interest to the pulp and paper industry.

Rhineland Yeast Plant To Start Up July 1

A new commercial fodder plant, using about 50% of the sulfite pulp mill effluent at Rhineland Paper Co., Rhineland, Wis., is now scheduled to start regular production about July 1.

No pre-performance claims are being made for the plant by the ten Wisconsin pulp mills and Detroit Sulphite Pulp & Paper Co., which have invested \$400,000 in the project. It is an outgrowth of ten years of cooperative research sponsored by these companies, including operation of a pilot plant at Appleton, Wis. Success of the Rhineland plant will depend partly on the response of farmers in purchasing its fodder yeast as a supplementary food for poultry, horses and hogs.

Rhineland's sulfite pulp capacity is about 100 tons daily. It is probable that about four tons of yeast can be made per day (**PULP & PAPER**, Jan. 1948, page 36).

Spain Makes Rayon From Straw Pulp

Dr. Robert S. Aries, director of the Northeastern Wood Utilization Council, Brooklyn, returned recently from Spain where he made a study of mills there with Dr. D. F. Othmer, an associate connected with the Polytechnic Institute of Brooklyn. A part of the trip was in connection with mills near New York which Dr. Aries and others have projected for using the oak-hickory belt wood near Manhattan.

"Spain in general is a pulp importing country," Dr. Aries told **PULP & PAPER** upon his return. "Its paper industry is well developed and, before the war, could satisfy the demand. However, the paper manufacturing has grown so much in the last ten years that there is a decided pulp shortage there. Their imports from Sweden are at prices substantially higher than exist here. There is a rather flourishing black market on paper."

Among novel developments in Spain, according to Dr. Aries, are two plants making rayon from straw, a development which has taken place in the U. S. only on an experimental level. "In addition," he says, "there is a wallboard plant under construction which will use sawdust. The future plans in Spain include a mill to pulp esparto and a number of new paper mills."



THE GREAT INCREASE IN COATING OF PAPER all over U. S. and Canada, not only improves the product but makes possible important conservation of precious fibers. Approximately a one-third saving of wood fiber is achieved by the use of clay.

This picture shows a group of men who participated in one of the most important discussions ever held by this industry on coating, at Kalamazoo, Mich., Mar. 18, 1948, under auspices of the Michigan Superintendents division. L. to r. are: A. A. NEESE, Beloit Iron Works, who gave paper on winding; E. E. THOMAS, Appleton Machine Co., who noted advances made in calendaring of machine coated papers; RICHARD PEETERS, Kalamazoo mills of St. Regis Paper Co.; CHARLES CROW, Mead Corp., Chillicothe, O.; KENNETH W. OSBORNE, Ohio Boxboard Co., Rittman, O.; HERMAN G. RAPPOLT, J. O. Ross Engineering Corp., who discussed drying of coated paper; NORMAN I. BEARCE, Champion-International Co., Lawrence, Mass., and JOHN F. HALLADAY, Paper Mill Consultant of Elkhart, Ind. He said the audience of 250 was the largest gathering of coating operators and technicians ever brought together in that region. OLIN W. CALLIGHAN, of Edgar Bros, was Toastmaster at the meeting.

NEWSPAPER RESEARCH PROGRAM

A research program designed "to improve the appearance of the daily newspaper" has been authorized by directors of the American Newspaper Publishers Association. They have instructed a mechanical committee to undertake at once a project aimed at eliminating that old bugaboo of the industry—first impression offset.

The new chairman of the committee is J. L. Stackhouse, publisher of *Easton* (Pa.) *Express* and an ANPA director. In order to bring about an improvement in the physical appearance of newspapers through research, the following recommendations were set forth by J. W. Rockefeller, Jr., and Associates for consideration of the ANPA Board:

1. Set up a fulltime staff to collect and coordinate the research undertaken by:
 1. Individual newspaper publishers.
 2. Paper laboratories such as those in Montreal, Canada, and Appleton, Wis.
 3. Ink manufacturers (individuals and associations).
 4. Manufacturers of other materials going into the production of newspapers such as plates, mats, blankets, etc.
2. Set up commercial standards for the purchase of ink, paper, etc., on the basis of opacity, color, etc.
3. Establish a laboratory to be conducted by a fulltime staff employed by the association, or an engineering concern already established.
4. Confine the immediate work of the laboratory and experimental press to the development of better plates and blankets.

Only 100 Use 4 Colors

Although only about 100 of the 11,872 U. S. newspapers are now equipped to print four-color advertising and features,

the strong trend toward newspaper color is something for the paper industry to watch closely.

In recent years the news magazines, as well as the general magazines, have cut appreciably into the newspaper's advertising dollar. With their better paper they have been able to far outstrip newspapers in the reproduction of color advertising. Newspapers know they must meet this competition, and this means upgrading of paper quality for some dailies. High chemical and groundwood papers for gravure or offset work are already being used by several newspapers.

There are about 150 newspapers, in addition to the 100 above, which now accept three-color work. More than 400 will print one color in addition to black. The newspaper industry admits that color results on newsprint are far from those obtained in book paper magazines.

Under One Roof

The Los Angeles division, Zellerbach Paper Co., is now under one roof again at 4000 East Union Pacific Ave.

War time emergencies had made it necessary for the company to operate from three temporary locations in addition to the main office and sample rooms at 3000 East 12th St.

The new building, which covers 10 acres of floor space, incorporates all the latest developments to insure efficient distribution. There is unlimited parking area for employees and customers, and spur track facilities.

A feature of the building is that all offices are windowless, temperatures are automatically regulated, and the lighting is scientifically planned. There are also adequate assembly and lunchrooms for employees.

Interesting facts about PAPER



The sulfite process, developed by the American, Tilghman, in 1867, was a revolutionary step forward in general enlightenment, since it brought paper and, hence, reading matter within reach of all. It made possible the production of paper from cheap wood in place of costly rags which were previously required.

INTERESTING FACTS ABOUT ULTRAMARINE BLUE

ULTRAMARINE BLUE is the finest clear blue pigment for paper coating and wall-paper printing. It has excellent light fastness, resistance to alkali and it disperses readily in water.

ULTRAMARINE BLUE is one of the cheaper and better coloring materials for a

wide range of industrial purposes requiring bright-toned blues. It is compatible with both casein and starch and is available in both dispersible and pulp form.

Your Calco representatives will gladly give you full information on ULTRAMARINE BLUE and other Calco colors for paper.



CALCO CHEMICAL DIVISION
Heller & Merz Department

AMERICAN CYANAMID COMPANY
Bound Brook, New Jersey

New York • Chicago • Boston • Philadelphia • Charlotte • Providence

Personals

NORTHEAST

WILLIAM W. CAMPBELL, JR., director and representative of Lockport Felt Co., was married in New York on St. Valentine's Day and with his charming bride made a wedding trip to Mexico on a freighter from New Orleans to Vera Cruz, selecting this transportation in order to get their car into Mexico without driving over the mountains. He had a visit with **PEDRO MARTIN**, Apartado Postal 544, Mexico City, who represents Bulkley, Dunton Pulp Co., Lockport Felt and other companies in that country.

FRANK FRAMPTON, general superintendent at Fox River Paper Corp., and **A. E. FRAMPTON**, advertising manager of Hammermill Paper Co., Erie, Pa., have compared notes and figure they might be distantly related as both family lines go back to Maryland. Frank's brother Charles, a retired superintendent in Pomona, Calif.

WILLIAM O. (BILL) SEMPLE has been appointed district sales manager for the New England territory, it has been announced by the United Board and Carton Corp. Upon entering the paper field he joined Dixie Cup where he helped introduce the first packaged cups in color. From there he went to American Lace Paper as New England sales manager, and then to Sutherland Paper Co. where he has been for the past ten years.

JAMES L. RODGERS, JR., has been appointed general manager of American Cyanamid Co.'s newly formed Plastics and Resins Division. Mr. Rodgers, formerly general manager of the Plaskon Division, Libbey-Owens-Ford Glass Co., brings to the division a wealth of experience dating back to the original production of urea resins and molding compounds.

WALTER W. HANES has been appointed by St. Regis Paper Co. as assistant to Alex Smalley, director of labor relations. Mr. Hanes was with the FBI from 1940 until the time he joined St. Regis. He graduated from the Ohio State University and practiced law in the District of Columbia.

FREDERIC P. KLUND, 74, consulting engineer and assistant secretary of the Hammermill Paper Co., died March 30. He joined Hammermill at the time of its foundation in 1898, and supervised design and construction of the original plant. He was the mill's head engineer until 1918.

ANDREW J. LACOCK has been named New York district manager of sales for Lukens Steel Co. and its divisions, By-Products Steel Co. and Lukenweld, Coatesville, Pa., according to announcement by J. Frederic Wiese, vice president in charge of sales for Lukens. Mr. Lacock will make headquarters at 50 Church St., New York.

NICHOLS HONORED BY INSTITUTE



More than 75 men prominent in the industry gathered April 1 at the Biltmore Hotel, New York, to honor Harold Nichols, Crown Zellerbach Corp., at dinner arranged by J. A. C. Kavanagh of the Paper Bag Institute. Occasion was appointment of Mr. Nichols as sales manager of Crown's multiwall bag division and his transfer to San Francisco May 1.

In picture above are: Darnell Every, Kraft Paper Assn.; Thomas Burke, Glassine Manufacturers Assn.; George Stuhr, International Paper Co., master of ceremonies; Mr. Nichols; Frank Pecta, Paper Shipping, Sack Manufacturers Assn.; and Mr. Kavanagh. Transfer to San Francisco is "coming home" to Mr. Nichols. He left there 14 years ago for Eastern Division of Crown and was its Gen. Mgr. He is well known for his work in Washington during the war. Wayne Brown succeeds him in New York.

RALPH G. LUFF, D. L. Ward Co., Philadelphia, was elected president of the National Paper Trade Association at the concluding session of its annual convention during the week of April 5th at the Waldorf-Astoria, New York City.

NED GRIFFITH BEGLE, a leader in wood products on the east coast for many years, died recently. He was 68 and made his home in Greenwich, Conn. Until its acquisition last year by the Diamond Match Co., Mr. Begle was president and chairman of the board of the B-F-D Co.

WILLARD S. GAMBLE, one of the most prominent and well liked young executives in the paper industry, died suddenly in March at the age of 42. He was president of the Brownville Board Co., Watertown, N. Y., in which he had become associated with his father in 1931. He was a member of the Northern New York Paper Manufacturers Group and its president in 1938. In 1944 he was appointed to the war control termination committee of NAM.

THOMAS L. HINES, manager of the Celophane Division, who celebrated his 65th birthday March 22, retired on March 31 after almost 33 years of service with E. I. du Pont de Nemours & Co.

KARL A. CLAUSON, secretary-treasurer of the Association of Pulp Consumers, Inc., 385 Madison Ave., New York, left April 27 by plane for an extensive tour of Europe, including Scandinavia, in the interest of the association. He expects to return about the middle of June.

Maynard Wright Dies in New York

Maynard E. Wright, assistant sales manager of Bagley & Sewall Co., Watertown, N. Y., for 23 years, died of pneumonia in a New York hospital March 20. He had been taken ill while attending "Paper Week" in New York in late February. He was 42.

Mr. Wright is survived by his father and two sisters, one of them being Miss Marjorie L. Wright, secretary of Bagley & Sewall.

Another Alaska Timber Sale Sabotaged by Interior Dept.

As forecast in **PULP & PAPER** in the April issue, there were no takers when the U. S. Forest Service offered 1½ million cubic feet of pulp timber in the Ketchikan area of Alaska for sale April 14 in Washington, D. C.

Previous attempts to sell this timber and also timber in the Petersburg-Thomas Bay area of Alaska failed for lack of bidders, and no future auction sales are planned.

Forest Service officials said prospective bidders apparently were fearful of ownership claims of Alaska Indians. An investigation by **PULP & PAPER** revealed that Department of Interior officials encouraged, advised and supported Indian lobbyists and lawyers in advancing these Indian claims.

Murdock Receives Medal in Japan

The Japanese pulp and paper industry in a ceremony in Tokyo March 17, awarded Harold R. Murdock, Asheville, N. C., head of the Pulp and Paper Branch of SCAP's Natural Resources Section, the first Murdock Medal for distinguished service to the industry.

In accepting the bronze medal from Snigenao Kanai, president of the Japanese Pulp and Paper Association, Mr. Murdock, former research director for Champion, said that without "your splendid cooperation" in carrying out directives of General MacArthur, the award could not have been possible.

Mr. Murdock is credited with increasing pulp production 35% by introduction of the "Murdock" or semi-chemical process, according to an army announcement. He also drew up a production plan for rayon pulp which has resulted in monthly yields of nearly 4,000 tons with more than 90% alpha cellulose content.

Also introduced by Mr. Murdock was use of infusorial earth to check the difficulties caused by oozing pitch during pulping of pine.

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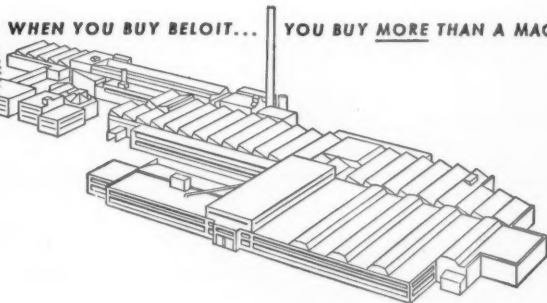
Beloit double-drum winder, here shown operating on a Kraft high-speed machine, runs a full range of grades, from tissue to board, on large or small diameter rolls. Highly efficient unit includes special

Beloit features: drum-type brake, patented roll ejector, shear slitters, driven rider roll. Winding speeds: 0 to 3,500 feet per minute. Electric roll-lowering table if desired.—Beloit Iron Works, Beloit, Wis.



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YOU BUY MORE THAN A MACHINE!



BELOIT

PAPER MACHINERY

Personals

PACIFIC COAST

McDermott Named Supt. Of New St. Regis Mill

John McDermott, former mill superintendent of the Taggart Corp. mill at Oswego, N. Y., has been appointed paper mill superintendent for St. Regis Paper Co., Tacoma, Wash.

Roy K. Ferguson, president of St. Regis, recently announced that the new paper mill being built adjacent to the company's kraft pulp mill in Tacoma, Wash., should be in production by the end of 1948. The paper machine will convert 240 tons daily of the total of 300 tons of pulp produced at pulp mill there. Also there will be a multiwall bag plant.

Mr. McDermott will be responsible to Walter DeLong, vice president and general manager in Tacoma. At the Taggart mill in Oswego he has been directing production of multiwall bag specification kraft paper on a Fourdrinier machine with 150 tons daily capacity. Taggart Corp., which has four kraft paper mills in New York state, is a subsidiary of St. Regis.

W. P. Foote Becomes Bristol Northwest Engineer

William P. Foote has been appointed sales engineer in the Pacific Northwest for The Bristol Co., according to J. W. Peckham, west coast manager whose offices are in San Francisco. Mr. Foote's office is at 6624 White-Henry-Stuart Bldg., Seattle, Wash., where he succeeds Arthur Damman, who has joined Instrument Laboratory Inc., in Seattle. Mr. Foote formerly was in San Francisco and Los Angeles for Bristol and also in the Bristol plant at Waterbury, Conn., and for the past two years he was in Montana which is now one of the four states in his territory. He graduated in chemical engineering from Massachusetts Institute of Technology in 1934.

J. D. ZELLERBACH, president of Crown Zellerbach Corp., found the long arm of coincidence can reach half-way around the world.

After attending sessions of the ILO in Geneva in March, he received permission to visit Germany. The State Department assigned Major H. Mullaney, labor attache in Berlin, to accompany Mr. Zellerbach. Telephoning to confirm arrangements, the major said: "I feel I know you already—you see, my brother, BERNARD MULLANEY, is personnel supervisor in your mill at Port Townsend."

JACK HANNY, vice president in charge of operations of Crown Zellerbach Corp., San Francisco, and Mrs. Hanny have quit apartment life for a new home at St. Francis Wood, west of the bay city.



WALT BEAN (left), Master Mechanic, and ROBERT W. STEVENS (right), Manager, of the Angelus Paper Box Co., Eastern Ave., Los Angeles. They have been busy lately overseeing installation of a new General Electric Amplidyne drive and new wet end for their 96-inch trim Black Clawson cylinder machine. Mr. Stevens and his Superintendent, C. E. Shawhan, recently of the new Puerto Rico mill, boosted this 60-ton daily rated capacity machine's production up to 92 tons of chipboard.

MR. AND MRS. EARL YORK of Longview, Wash., recently spent a flying vacation with son Howard, a major in Marine air corps, in Hawaii. Mrs. York is receptionist and switchboard operator for Longview Fiber Co., and Mr. York is a veteran head brakeman for Weyerhaeuser Timber Co.

W. R. BARBER, technical director of Crown Zellerbach Corp., has been appointed by Governor Wallgren of Washington to the advisory committee on fiber products of the State Institute of Forest Products.

E. FRED EMERY, 84 ex-vice president of Spaulding Pulp & Paper Co., Newberg, Ore., died April 5. Mr. Emery was born in Millsboro, Pa., and was married in Pennsylvania in 1909 to Susan Pittock, eldest daughter of Henry L. Pittock, founder of the Portland Oregonian.

E. W. ERICKSON, consultant for Fibre-board Products Inc., in connection with construction of the new pulp and paper mill at East Antioch, Calif., is living with his wife and son at the Diablo country club in Danville, Calif., just 30 miles from the new mill site and with a golf course just a few steps from their door. Nearby neighbors are A. B. LAYTON, vice president of Crown Zellerbach Corp., and his family.

MRS. HAROLD CAVIN came in first in the Women's Slalom Races at a recent ski meet of the Mount Baker Ski Club.

HAROLD CAVIN, resident engineer for Puget Sound Pulp & Timber Co., is head of the Mount Baker Area Associated Ski Clubs.

WILLIAM PARKINSON has moved to West Linn, Ore., as assistant purchasing agent of the Crown Z mill there. Merritt Wilson is the p.a. Mr. Parkinson was succeeded in San Francisco by Howard Becker as assistant to headquarters purchasing agent, Francis T. Bowles.



JOHN HOLMBERG (left), Converting Plant Machinist of Crown Zellerbach Corp., Camas, Wash., receiving a \$845 award, biggest ever given at this mill, from A. G. NATWICK, Assistant Resident Manager, for a suggestion submitted for improvement of converting plant machinery. Mr. Holmberg designed a mechanical breakdown of toilet tissue rolls, which acts as a time saver and eliminates the fatigue and strain resulting from breaking down the rolls by hand. Mr. Holmberg previously won \$355, the largest award to any employee until he broke his own record. Savings made possible determine the amounts.

RAYMOND J. LEE, executive vice president and treasurer of Lockport Felt Co., recently toured the Coast mills with Alan Dunham, of Portland, Ore., Pacific Coast representative for Lockport, and Richard Buckley, who is Mr. Dunham's associate. This is the first time Mr. Lee has been west since he made a tour by private airplane as a boy in company with his father, former N. Y. Senator William H. Lee.

THE BASKETBALL team representing Port Townsend Division of Crown Zellerbach Corp. defeated Fort Worden for the Port Townsend City League championship for 1948. The mill team was coached by VINCE McDONALD, accountant in the office, and the manager was NELS KJELLIN, backtender on No. 2 Paper Machine, who has long been an active supporter of Crown Z athletic teams.

J. E. CROSBY, resident manager, and other officials of Western Waxed Paper Co. division of Crown Zellerbach were treated to a big surprise at the ground breaking ceremony for their new San Leandro, Calif., plant when the mayor of San Leandro, Thomas O. Knick, turned up with a 40-year service pin of the old Crown Willamette Co. He explained the pin had been the property of his late father-in-law, John Walker, formerly in charge of Crown Willamette timber operations in Oregon.

MOSS BARR, plant superintendent of the North Portland, Ore., plant of Western Waxed Paper Co., has been transferred to the Oakland, Calif., division where he serves as superintendent.

EDGAR C. SHERMAN, technical supervisor of the Port Townsend, Wash., mill for Crown Z Corp., was called up for a week's duty as lieutenant commander in a new naval reserve composite division being organized in his region.

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WILL EMBODY ALL THESE MAJOR IMPROVEMENTS

1. All air is filtered.
2. Thoroughly air tight heater casings and piping.
3. Higher air temperature.
4. Graduated and easily interchangeable orifices.
5. Air also supplied to Dryer Felt Pockets.
6. Front drop pipes are installed inside frames where possible for safety of operator.

When you compare the modern ROSS-GREWIN System with those we installed years ago, you will appreciate the value of the many improvements that have been made in recent years. Our long experience gained from installing ROSS-GREWIN Systems on nearly 400 machines enabled us to improve the design and construction to assure a system which now retains its high original effectiveness indefinitely.

To get the full, lasting benefits of these six major improvements, make sure that your new ROSS-GREWIN System is properly constructed to incorporate them.

Your nearest ROSS office will gladly furnish complete detailed information.

and now you get

7. Centrifugal type Compressor with hand-wheel operated volume damper, which allows instantaneous and accurate adjustment of air pressure to suit the grade of paper being produced.

Reduced reproduction of advertisement published in 1947 issues of leading trade magazines.

No past accomplishment is ever considered "good enough" for ROSS engineers. ROSS Systems are continually being improved to provide increasing measures of economical efficiency in the production of pulp and paper. These additional features and design changes and improvements in ROSS Systems are planned to keep pace with changes in mills and machine designs, production and operating methods, basic materials and finished products.

The 7 major improvements now embodied in the design and operation of the ROSS-GREWIN System are typical of other ROSS systems. If it is new and needed you can be sure ROSS will supply it.

Perhaps your ROSS-GREWIN System can be revamped to provide some or all of these new features at relatively small cost.



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MAY, 1948

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"The most effective way to encourage the growing of trees is to develop profitable reasons for cutting them down." — (A. G. T. Moore, Southern Pine Assn. executive, in 1938).

EMERGENCY FUNDS ARE URGED To Salvage Infested Timber in West

In April the pulp and paper industry, through E. W. Tinker, executive secretary-treasurer of AP&PA, indicated to the U. S. Forest Service that national forest conditions in Montana, Colorado, Wyoming, and Idaho appeared to be of an "emergency" nature and that therefore USFS would be justified in re-allocating present funds to make some of this timber available to industry. The plea was coupled with emphasis on the world pulp shortage, now aggravated in the U. S. by curtailment of Canadian exports.

Millions of feet of timber have been killed in these states by insects and must be used soon for pulp or the timber will be useless. It has no other possible use.

According to well informed sources, the USFS has approximately \$9,000,000 for logging roads, as well as a maintenance fund which might be reorganized for the purpose of assisting in the Pacific Northwest problem.

Said one observer to **PULP & PAPER**: "If these were private timber lands there would be no difficulty in getting an RFC loan to relieve the situation as an emergency measure. But inasmuch as this is taxpayers' timber, and the USFS is un-

willing to act—without additional funds—the situations grows steadily worse and much of this timber is going to be lost."

Earlier, three spokesmen for the Michigan and Wisconsin paper industry, and Congressman John W. Byrnes (R) of Green Bay had told the House appropriations subcommittee, considering the agricultural department's budget, that these forests should be opened to logging. The industry men were Charles R. Seaborne, vice president and general superintendent, Thilmany Pulp and Paper Co.; Norman R. Stone, president, Stone Container Corp.; and Francis Keifer, president of Port Huron Sulphite and Paper Co.

The witnesses before the committee laid emphasis not only upon the fact that a tremendous amount of spruce had been killed by the bark beetle, still spreading in the Southern Colorado territory, but that there existed a tremendous amount of pulping species in all of the Rocky Mountain states that was over-mature, depreciating in value, and particularly vulnerable to insect and disease attacks.

The industry representatives did not attempt to prescribe the specific action that the Congress might take but in a broad way confined themselves to a description

of the opportunity that existed in the Rocky Mountain territory, the necessity for some action if this resource, the ownership of which lay in the federal government, was not to be wasted, and the needs of the Lakes States' mills for additional supplies of pulpwood.

The committee gave the presentations a very sympathetic hearing but from the questions that were asked it was quite apparent that there existed a question in the minds of the committee with respect to the possibility of opening up these areas with funds already available to the Forest Service. This was particularly true in the emergency situation that exists in the areas within which the salvage of insect killed timber was necessary.

Mr. Byrnes estimated that the cost of the work would be about \$750,000 but recommended that no increase in the USFS budget be indicated. He was merely pressing for priority on the job. He estimated that the sale of government timber would cover the cost of building the main access roads. Argument was that the national forests there should be thinned to remove over-mature timber, to prevent the spread of bark beetle, disease, and reduce fire hazard.

QUEBEC MEETING STRESSES ECONOMY

Increased use of mechanized equipment in the forest is leading to a closer affinity between the pulpwood industry of the east and logging operations in the west.

This was stressed at the annual meeting of the woodlands section, Canadian Pulp and Paper Association, in Montreal March 31-April 2, attended by over 600 delegates. Robert M. Fowler, president of the association, spoke of the relationship between logging operations in Eastern Canada and in British Columbia.

"It seems clear that the gap between the two types of operation is rapidly

narrowing," he said. "There is much that eastern operators can learn from experience in British Columbia and, possibly, there is a mass of information in Eastern Canada that will be useful in the logging developments that seem probable on the Pacific Coast."

Mr. Fowler urged extension of the woodlands section's activities into British Columbia and closer relationship between eastern and western wood production.

The new chairman of the woodlands section is J. W. Paterson, woodlands manager of the E. B. Eddy Co., Hull, Que.

Vice chairman is Gordon Godwin, Quebec North Shore Paper Corp., Montreal.

Councillors are: R. S. Armitage, Price Brothers & Co., Chicoutimi, Que.; A. F. Buell, LongLac Pulp & Paper Co., Terrace Bay, Ont.; A. H. Burk, The KVP Co., Espanola, Ont.; G. Harold Fisk, Pacific Mills, Ltd., and Powell River Co., Montreal; F. A. Harrison, Canadian International Paper Co., Montreal; P. V. LeMay, Marathon Paper Mills of Caanda, Port Arthur, Ont.; J. B. Matthews, Abitibi Power & Paper Co., Toronto; R. G. MacFarlane, Fraser Companies, Ltd., Edmondston, N. B.; Duncan McLaren, Bathurst Power & Paper Co., Bathurst, N. B.; J.



You'll See Double

If you visit Moore & White—and we wish that you would—you'll find that our plant-capacity has recently been *doubled*. Even more important to you as a paper-maker, something significant has been added to the personal equation.

A sustained upsurge in orders made this expansion imperative. Reinforcements of machinery and brains—experienced key men to round out a hard-hitting team—just had to be added to cope with

present production-demands and anticipated business. In drafting room, shop, and field, we're now set up better than ever to give you expert counsel and painstaking service in every aspect of your paper-making operations.

Competition gives no quarter; the faltering performance of ageing equipment cannot be tolerated.

Moore & White will get at the heart of your production-problems . . . rebuild your laggard machines to deliver the greatly increased tonnage demanded by today's high break-even point.

We suggest that you call in a Moore & White sales-engineer. His findings and recommendations will be a revelation to you.

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CUSTOM-BUILT MACHINES FOR MAKERS OF PAPER AND PAPERBOARD

MAY, 1948

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A. McNally, Brown Corporation, Quebec.

Ex-officio members are: W. A. Delahey, Great Lakes Paper Co.; C. R. Mills, Ontario Forest Industries Association; Edgar Porter, Quebec Forest Industries Association; C. R. Whitehead, Consolidated Paper Corp.; J. O. Wilson, Anglo-Canadian Pulp and Paper Mills.

Manager is W. A. E. Pepler. Assistant manager is W. D. Bennett.

Emphasis this year was placed on forest management, technical training of workers and improved operating methods.

"The real keynote," declared Mr. Pepler, "is the economic operation of a self-producing supply of raw materials for the industry."

Indicative of growing interest in the forest is the growth of the woodlands section from a membership of 200 before the war to more than 700.

R. S. Armitage, woods manager of Price Brothers & Co., was presented with the Ellwood Wilson Award by H. R. Soderstrom, general woods manager, Brown Corp. This award, donated by Brown Corp., has been presented annually since 1942 for effective industrial application of research projects. Mr. Armitage's contribution in the training of woods personnel and in production of the film "It Pays to Be Trained" was recognized.

Alex Koroleff, director of woodlands research, announced that the Pulp and Paper Research Institute is contemplating substantial extension of its forest research work which would include forest regeneration, logging techniques and elimination of wood waste.

J. L. Kelly, of Price Brothers & Co., reported that snowmobiles have proved to be an essential part of the mechanical equipment used in present logging operations in eastern Canada and that they are replacing the horse in transporting supplies to camps, hauling out pulpwood, etc. He said the snowmobile will haul twice the load of a horse 5½ times as fast, regardless of weather.

Developments in mechanical logging were reviewed by A. A. St. Aubin, former manager of the logging mechanization section, who spoke of the development of a machine, embodying a new principle, for bark removal which, if successful, might revolutionize present methods used by the industry.

R. C. Hopkins, of the Four Wheel Drive Auto Co., explained some of the costly experiments being made by truck companies in developing the most effective transportation units for pulpwood harvesting.

ED HEACOX, until recently chief forester of Longview branch of Weyerhaeuser Timber Co., Longview, Wash., is now manager of the company's forestry department, working directly under C. Davis Weyerhaeuser in the Tacoma, Wash., office. Bill Price, recently made general manager of Shasta Forests Co., Westwood, Calif., was formerly manager of the Weyerhaeuser forestry department. Dwight N. Jeffers is carrying on the work at Longview which was formerly handled by Heacox.



AT MONTREAL CPPA WOODLANDS SECTION MEETING. Top row, l. to r.: R. S. ARMITAGE, Woods Manager, Price Bros. & Co.; W. A. E. PEPLER, Manager, Woodlands Section, Canadian Pulp & Paper Assoc.; M. R. KANE, Vice President in charge of Woodlands, Price Bros. & Co.; GORDON GODWIN, Woodlands Manager, Quebec North Shore Paper Co. Second row, l. to r.: J. W. PATERSON, Woodlands Manager, The E. B. Eddy Co., and new chairman of CPPA Woodlands Section; V. E. JOHNSON, Vice President, Canadian International Paper Co., in charge of Woodlands Operations; R. G. MACFARLANE, Manager of Lumber & Logging Dept., Fraser Co.'s; JOHN FISHER. Bottom row, l. to r.: FRANK SHARP, Timber Management Div., Ontario Dept. of Lands & Forests; FRANCOIS FAURE, Vice President, Woodlands, Consolidated Paper Corp.; C. B. DAVIS, General Woods Manager, Abitibi Power & Paper Co.; GEORGE TUNSTALL, Director of Operations, Dominion Forest Service.

Log Dump Equipment For Hawley Mill

Log dump for Hawley Pulp & Paper Co., Oregon City, which represents an investment of approximately \$125,000 and utilizes a huge whirley crane from Oregon shipyard to handle a complete carload of logs in a single lift, is now in operation east of Winona station along the Salem-Dalles highway.

Ten or 12 men are employed unloading and rafting logs from 40, 50 and even 60 cars received daily. The cargoes are made up chiefly of spruce, fir and hemlock loaded at Rockaway along the Oregon coast.

Crane operations are motivated by a 150-horsepower electric motor with a maximum lifting capacity of approximately 70 tons. Each carload, consisting of between 7000 and 10,000 feet of logs, is estimated to weigh nearly 50 tons. A car jack for pulling loads into position for discharging is also electrically operated. Logs are rafted into tows and sent downstream.

Pulpwood R. R. Income

Transporting pulpwood to paper factories earns the Boston & Maine Railroad more than \$4,000,000 annually. The pulp is carried from the forests to Maine, New Hampshire and Canada.

Kimberly-Clark Has Big Woods Division

The woodlands division of Kimberly-Clark Corp. which has over 8½ million acres of timber holdings in Canada and the U. S. lake states, is featured in a recent issue of Cooperation, the firm's houseorgan.

Over 10,000 carloads of wood roll into the U. S. mills each year while Canadian pulpwood is processed in Canada with the exception of a small amount sent direct to the woodyards at Kimberly and Niagara, Wis.

This spring will see pulp logs diverted to the woodyard of the LongLac Pulp and Paper Co., new K-C operation at Terrace Bay, Ont., there to be stored until LongLac's 300-ton sulfate pulp mill goes into production in January, 1949.

R. W. Lyons, of Neenah, Wis., assistant vice president, is general manager of the woodlands department which has a complete organization at each of the K-C's six operating companies. Over 60 graduate foresters are included among the personnel.

AXEL BRANDSTROM, Seattle, has been appointed forester for Columbia Cellulose Co., the Celanese Corp. of America's subsidiary preparing to establish a high-grade sulfite pulp mill at Port Edward, near Prince Rupert, B. C.



Paper Comes to the Schoolroom

Only fifty years ago in millions of grade and country schools, children were doing their sums and composing their sentences on slates. Then, as more and more paper mills sprang up to make paper from wood, their product—low cost and plentiful paper—began to change the methods and the minds of America.

No symbol of that change was more significant than the passing of the slate, the coming of the tablet, pad and notebook, followed by

free textbooks. The stimulus to the advancement of education was profound.

Today, children and youths in more than 213,000 schools and colleges write their lessons, their reports, their theses on paper. Today, libraries in every community make available for all, the accumulation of the world's great thinking. Paper, plentiful paper, has set minds free through knowledge, has brought the opportunity for culture to every home.

The dramatic story of paper is told in the sound-and-color film, "Paper—Pacemaker of Progress," and in a book under the same title. Both are presented by F. C. Huyck & Sons as a tribute to the Paper Industry. The book will be sent free upon request.

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Pacific Coast Representative: Pacific Coast Supply Co., Public Service Bldg., Portland, Ore.; 343 Sansome St., San Francisco, Calif.

MAY, 1948



PORT TOWNSEND MILL

Starts Up New Equipment



LEFT TO RIGHT (top) are Port Townsend mill's principal pin winners present at dinner: Jim McKee; G. B. Thomas, Supt., Finishing and Shipping; Ed Drake, Asst. Plant Engineer; John K. Davis, Tour Boss; Finley Brown, Wood Mill Supt.; Harry Woolever, Cutterman; Chester Gillett, Machine Tender; William Cornett, and Harry E. Bukowsky, Plant Engineer. Mr. Woolever's was for 35 yrs., Mr. Thomas' for 30, Mr. Davis's and Mr. Gillett's for 25, Mr. Drake's for 20 and the others for 15.

Below are the speakers: Don Adair, State Supervisor of Safety; Resident Manager Leonard Ziel and Vice President Don Denman.

The Port Townsend, Wash., division of Crown Zellerbach Corp., is making rapid progress in a program of improvements which began last year. The new multi-wall bag plant, covering an entire city block, is rapidly taking shape with the structure virtually completed.

The new wood preparation plant, where a Bellingham type whole log hydraulic barker is being installed and a big log chipper from Sumner Iron Works is already in place, is also making progress.

In April, a new Bird Machine Co. Jonsson screen and a Swenson-Nyman washer were being started up. The new 9 x 12 ft. washer provides a fifth washer for this mill which is now averaging 350 tons of pulp and 315 tons of paper daily, and this is the first adding to washing capacity since the original washers were put in. The addition means chemicals can be saved by avoiding overloading the pulp washing system.

The Jonsson screen is handling black stock ahead of the new washer.

Another new addition in the past month is the installation of an A. O. Smith Corp. spot-welded stainless steel lined digester. It is contemplated that another A. O. Smith digester of this type will be added, and at that time it may result in added capacity. The digesters take 6½-ton charges.

Three wet machines moved from the West Linn, Ore., Crown Z mill, installed

in a Quonset hut on the mill grounds, are in operation converting excess pulp capacity into wet lap which is sold.

Visitors at Port Townsend these days are impressed with the sight of over 5,000 cords of small salvaged wood stacked in long piles on mill property, presenting a picture which is familiar in the east and south but which has never before been seen on the Olympic peninsula. This is evidence of cleaner logging, and improved wood utilization. Hydraulic barking has made it economic to use this wood and the Bellingham type barker is designed to efficiently clean this wood as well as the large logs.

Pin Dinner

The Port Townsend staff headed by Leonard Ziel, resident manager, took time out from "high-balling" with their big mill improvement program Apr. 5 to honor about 70 employees with service records of five to 35 years.

Dan Adair, supervisor of the division of safety, State of Washington, made the key address and this was fitting because Port Townsend has had the second best safety record in the mills of the state during 1947. Mr. Adair said that in the state industry there was just one-half the chance of an employee being injured in 1947 as there was in 1946, due to development of prevention programs.



AT PORT TOWNSEND MILL DINNER (Top, l. to r.): Gil Thomas, Fin. & Ship. Supt., and Guy Emerson, Pulp Mill Supt. Jack Davis, Tour Boss, and Harold Quigley, Paper Mill Supt.; Chet Gillett, Machine Tender and Harry Woolever, Cutterman; Dr. Geo. Bangerter and Chas. Bartlett, Port Townsend div. leaders who were given honorary pins.

He praised the Port Townsend mill for modern safety color paint program being carried out throughout the mill. He said there were 600,000 days lost by accidents in Washington state plants in 1947.

Don S. Denman of Seattle, vice president of Crown Zellerbach Corp., who is responsible for wood supply for the northern mills, predicted that wood supply would improve in the future as a result of closer clean-up and utilization and said "the toughest days are over."

Mr. Denman presented pins and principal winners are shown in accompanying photographs.

PORT TOWNSEND DIVISION of Crown Zellerbach Corp. has established one of the most enviable records for any of the Crown mills by going 199 days without a lost time accident. It is the best record ever made at this mill and one of the best in any Crown mill, according to F. L. Ziel, resident manager. Bernard Mullaney is personnel and safety supervisor.

Less Newsprint in England

Higher priced newsprint and less of it is the prospect for the United Kingdom this year, according to F. B. Bishop, general manager of the Newsprint Supply Co. in a letter to all British newspaper publishers giving a provisional forecast of the supply picture in 1948.

Drought in Scandinavia is one of the reasons given for curtailed supply, together with the reduction in British newsprint production to 20% of capacity, compared with the 33 1/3% figure last year.

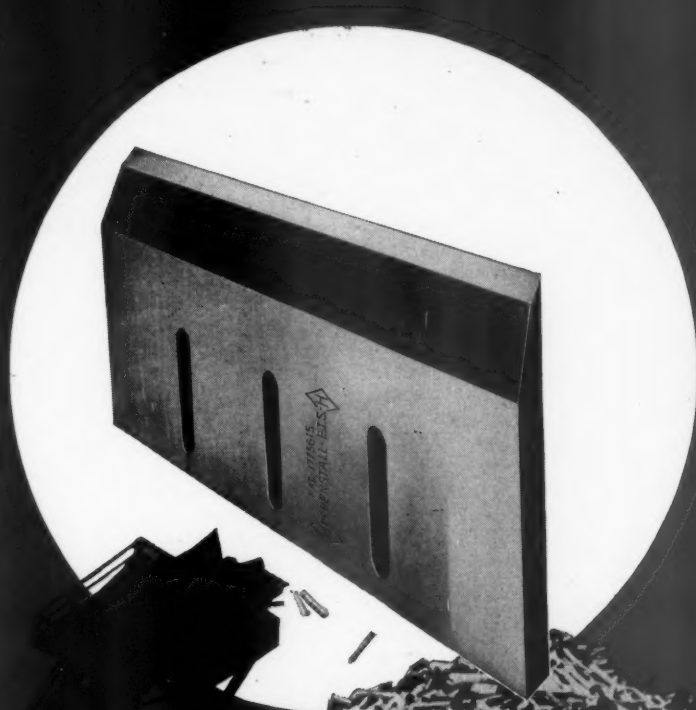
Chipping harder woods?

250

Heppenstall E. I. S. Knives

It takes a special knife to chip the toughest woods today—woods which are harder than ever before. Heppenstall E. I. S. Knives, made from the clean electric steel, are built to withstand repeated chopping impacts . . . to take heavy work as fast as you want to do it . . . to finish your work with results? Clean-cut, uniform chips, fewer loaded chips, and less wood waste.

Whether your mill is handling hard or soft woods—you'll never be really satisfied with anything less than a Heppenstall Chipper Knife. Write Heppenstall Knife Co., 1541, Pittsburgh 1, Pennsylvania.



TWO SULFITE PULP MILLS'

Modernization Program

During this coming summer it is expected that British Columbia Pulp & Paper Co.'s \$2,500,000 program of modernization at its Woodfibre, B. C., mill on Howe Sound, will be completed. Less extensive improvements are to be carried out at the company's Port Alice mill on Vancouver Island later in the year.

Main purpose of the present development is to effect more efficient and economical operation through the replacement of old equipment with modern units. The productive capacity of the mills will not be greatly changed as a result of the alterations, the Woodfibre mill's capacity being now about 230 tons of sulfite and dissolving pulp daily, and Port Alice's about 200 tons.

However, in carrying out its program several departures from the previous physical setup of the plants and their processing facilities have been effected, particularly in connection with the wood preparation features and power supply.

Bellingham Type Barker

Wood preparation was one of the first considerations of the company in preparing for more economical operation at Woodfibre and the hydraulic barking plant now being completed has one of the first concrete log hauls to be built in British Columbia.

The barking plant building is of steel internal column and roof and floor beam construction, with concrete walls, and a three-inch wooden roof deck with built-

up roofing. A 108-inch Simonds circular cutoff saw, driven by a 75 h.p. motor installed on the swinging saw frame, is located on the log deck.

The logs will come up the haul in 40-foot lengths and are to be cut into 20-foot lengths by the swing saw, which handles logs up to 46 inches in diameter, a motor-driven chain saw finishing the cut on the larger logs. Steam operated kicker arms will transfer the logs to the transfer deck.

A "Bellingham type" hydraulic barker (described in October, 1947, **PULP & PAPER**) manufactured by Canadian Sumner Iron Works, with 1,300 lbs. psi. discharge pressure, will be completely installed by March. A hydraulic slab barker meantime is being used and even with breakdown into slabs, big savings in wood are made. A 175-inch Sumner chipper, which is the largest yet to be installed in British Columbia and will handle logs up to 42 inches in diameter. Larger logs are broken down by a one-man headsaw with automatic carriage.

The chips will move from the chipper to the surge bin, which has been built in the hydraulic barker building. This bin is divided into four sections, beneath which are four Allis-Chalmers chip screens, 5 feet by 4 feet, fed by Link Belt rotary feeder.

Oversize chips and slivers are returned and broken down by a 24-inch Diamond hog and then returned to the surge bins. The accepted chips are fed on a 36-inch

belt conveyor to a Link Belt elevator. The three concrete chip storage bins are each 50 feet in diameter and 90 feet in height. The bins have steel hopper bottoms which discharge over a Merrick weightometer to the digesters. These are believed to be the largest chip storage bins so far erected on the continent.

The mill's cooking control system is being completely remodeled. New steel beams and mastic floorings on the top floor of the digester building have been installed, and two acid-resisting No. 16 gauge perforated blowpit bottoms are provided, replacing those in the other existing blowpits.

A Croll-Reynolds vacuum chilling system has been installed in the acid plant to control water temperature and provide absolute control over the combined setup. The bleached riffler room has been completely rebuilt and eleven modern rifflers, each 11 feet in width and 87 feet in length, are installed.

Use of Clark Trutractor Div. (Clark Equipment Co., Battle Creek, Mich.) loaders is a feature of the modernized warehouse, and these expedite warehousing operations and the loading of cars.

Water and Power Supply

Development of additional and more efficient water and power supply for the Woodfibre mill was one of the first undertakings of the company, and as a necessary preliminary a new dam was built at Henrietta Lake at the 2,800-foot level. Four miles of road had to be built in order to transport sand, gravel, cement, lumber and other materials to the dam site.

Henrietta Lake was drawn upon several years ago when a tunnel was driven under the lake, providing an effective drawdown with the new dam of about 85 feet. The tunnel discharges into Cedar Creek, and the water is picked up by a diversion dam, flumed to a screen house and through wooden stave and steel penstock to the mill power plant. The new dam is 54 feet high and 450 feet long.

In the power house, of reinforced concrete construction, the boiler house and power house being built back to back, there are three boilers, each of 600 pounds, 725 degrees F, T.T. The boilers are Bacock & Wilcox Type F integral furnaces, one being designed as an oil burning unit exclusively and the other two being fitted for either hogged fuel or oil. The latter two units have combustion chambers of a size permitting full production if fired on pulverized coal. These larger chambers were provided because of the possibility of a subsequent scarcity of hogged fuel or an uneconomic rise in the cost of fuel oil.

Multiclone ash precipitators manufactured by the Western Precipitation Co. of

NEW PHOTOGRAPH OF WOODFIBRE, on Howe Sound, where B. C. Pulp & Paper Co., is carrying out a modernization program costing approximately \$2,500,000. At the left is dock and part of townsite. Long, low-lying building at right foreground is "Bellingham-type" barker building. In front of chip storage bins is bleach plant and to left of this is new power plant. Second growth timber rapidly replenishing area cut over is shown in the background.



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balanced slime control

this new brochure
describes the most up-to-
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for effective control of slime in pulp, paper and paperboard plants.

San Francisco have been installed in the two hogged fuel units. The power plant on one floor has two Elliott steam turbines, each of 2000 k.w. capacity with 570 pounds pressure at the throttle and 725 degrees T.T. These are extraction type turbines extracting at 150 pounds for high pressure process and exhausting at 50 pounds for the low pressure process.

Jet type desuperheaters control the process steam conditions before it leaves the power house. On the same floor of the power house a 2000 K.W. Westinghouse



GEORGE A. WATT (left), new Technical Director for Griffith Rubber Mills, Portland, Ore. Graduate of Reed College, with master's degree from MIT, his 20 years technical work has been largely with Firestone and Hewitt-Robins Corp. and head of lab at government's synthetic rubber plant in Louisville, Ky.

A. R. HENDRY (right), joins Griffith after eight years as superintendent of Barley-Earhart Corp., Detroit, where he obtained numerous patents on rubber goods and 18 years with Manhattan Rubber Mfg. Co. and Buxbaum Rubber Mfg. Co.



HAL WAFFLE (left), Sales Manager for Griffith Rubber Mills, Portland, Ore., and BOB BAER (right), Sales Representative for the same company, who will contact the pulp and paper industry. Mr. Waffle attended U. of Oregon, received graduate certificate from American Institute of Banking and worked ten years in a Portland bank before wartime service in U. S. Coast Guard. Joined Griffith in 1945. Mr. Baer joined Griffith in 1947, was formerly with Metals Mfg. Co., San Francisco, after wartime service in Army Air Corps.

Classified Advertising

FOR SALE: 4 S. Morgan Smith Hydraulic Turbine units, each unit consisting of four 30" Type N Horizontal Wheels. The Old Town Company, Old Town, Me.

POSITION WANTED

Man 42 years of age, with over twenty years' experience in paperboard manufacture and control work desires change of location. Prefers position with mill making high grade specialties, food container, or set-up box grades. Experienced with colors and ink bases, design printing of covers and specialty grades. College education—available after reasonable notice. Reply, Box 8, Pulp & Paper, 71 Columbia St., Seattle 4, Wn.

condensing turbine, which was formerly in the old plant, is being erected.

A third Elliott steam set is being provided for when the load requires its installation and operation. On the same floor a 2812 K.V.A. Westinghouse engine type generator driven by a 3600 h.p. impulse wheel, single runner, is being installed. The tail race from the wheel leads to the filter plant for process water, the wheel operating under 400-pound pressure.

A metal clad switchboard with all safety provisions incorporated has been chosen for this operation, and the circuit breakers are electrically operated with an interrupting capacity of 100,000 K.V.A., which may be altered to 150,000 K.V.A.

Port Alice Improvements

Improvements at the Port Alice mill include the erection of three chip storage bins, 80 feet high and 50 feet in diameter, of similar design to those at Woodfibre.

Two miles of 18-inch woodstave pipe

delivering water from Victoria Lake at Port Alice have been replaced with 24-inch creosoted woodstave pipe and a new screen house and receiving tank have been erected.

The Port Alice power plant has been augmented by a 650 h.p. oil fired marine boiler. Three acid storage tanks have been replaced and two new water tanks provided for fire protection.

A 120-inch chipper has been installed and the blow valve and blow piping enlarged on No. 2 digester from 12 to 14 inches. Similar equipment will be installed on the other four digesters. The white water system is being completely revamped. A second pulp drying machine, a rebuilt Sandy Hill unit, with 100-inch face, single cylinder, driven by a steam turbine, has been installed. In the machine room the old wooden trusses have been replaced with steel trusses and a new ventilating system installed. Kamyr continuous chlorination has been installed.



Handy for purse or for gentleman's pocket is one of these small size pull-out packages being made at the new cellulose wadding plant now being operated by Kimberly-Clark Corp. at Memphis, Tenn.

A new product of the Memphis, Tenn., cellulose wadding plant of Kimberly-Clark Corp. is a small size cellophane wrapped "pull-out" package of Kleenex tissues that will fit in a gentleman's pocket or ladies' purse.

This first test sale was late in 1947 on newsstands in Chicago's giant Union Station. International Cellucotton Products Co. of Chicago, handles the marketing of Kleenex products.

Pocket Pack was whipped up so fast by transcontinental travelers that the newsstands and drug counters couldn't keep it in stock. So International Cellucotton tried it in other test areas. The result was the same, and word went up to Package Machinery Co., Springfield, Mass., to continue developments on the

special equipment which will turn out Pocket Pack on a mass production scale.

First really new tissue idea in a long time, Kleenex Pocket Pack appears to fill a long-felt demand. It carries 24 regular sized Kleenex tissues arranged in 12 two-ply pull folds and measures about 4½ inches long by 2½ inches wide and less than half-inch thick. A backer card gives rigidity to allow wrapping the whole in Cellophane, and tear tape is part of the package. The tear tape runs off in the same way as on a cigarette package, but leaves an opening horizontally across the face of the package wide enough for dispensing the tissues. Like the larger Kleenex cartons, the purse-size package leaves the next tissue in position for removal.

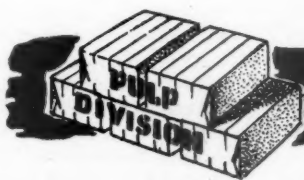
A Statement of Policy

"To operate the properties entrusted to its management in such a way as to provide a permanent and profitable investment for capital, to bring about continuous, profitable and enjoyable employment for men, and to furnish uninterrupted supplies of forest products to society."

Because the Weyerhaeuser Timber Company has adopted and pursued this policy, its Pulp Division can be depended upon to provide consumers of woodpulp with a reliable supply.

Today, Weyerhaeuser keeps looking to the future . . . growing trees . . . providing for re-seeding . . . arranging carefully-planned fire and pest control on company-owned timberlands.

On Weyerhaeuser tree farms the cycle of re-growth and timely harvest is actually being mapped one hundred years ahead! This is part of the company's *Permanent Production Program* designed to provide a continuing timber supply for its mills.



WEYERHAEUSER

AUSTRALIAN MILLS EXPAND

\$10,000,000 Invested in New Equipment

Nearly \$10,000,000 is to be expended on extensions by Australian Newsprint Mills Ltd. whose plant at Boyer, Tasmania, is the only producer of newsprint in Australia.

Controlled by the leading newspapers of Australia, the mills, which began commercial operation in 1941, are making a vital contribution to the Australian publishing industry whose supplies of North American newsprint have been critically reduced, firstly by the Second World War, secondly by the current dollar shortage.

Newsprint production is planned to reach 75,000 to 80,000 long tons per annum in the first half of 1950 (present capacity 30,000 tons).

Australian Newsprint Mills are the result of extensive experiments to make use of Australian eucalyptus as a source of newsprint, which began more than 25 years ago when shortages during and after the First World War indicated the vulnerable position of the Australian publishing industry.

Research showed that the hardwood most suitable for production of newsprint was *Eucalyptus regnans*, or swamp gum, of which good stands exist in the upper reaches of the Derwent watershed in southern Tasmania. In this district the company holds an 88-year concession probably the most important large compact virgin area of regnans in the Commonwealth.

Total concession area is 300,000 acres, of which about one-third is regnans.

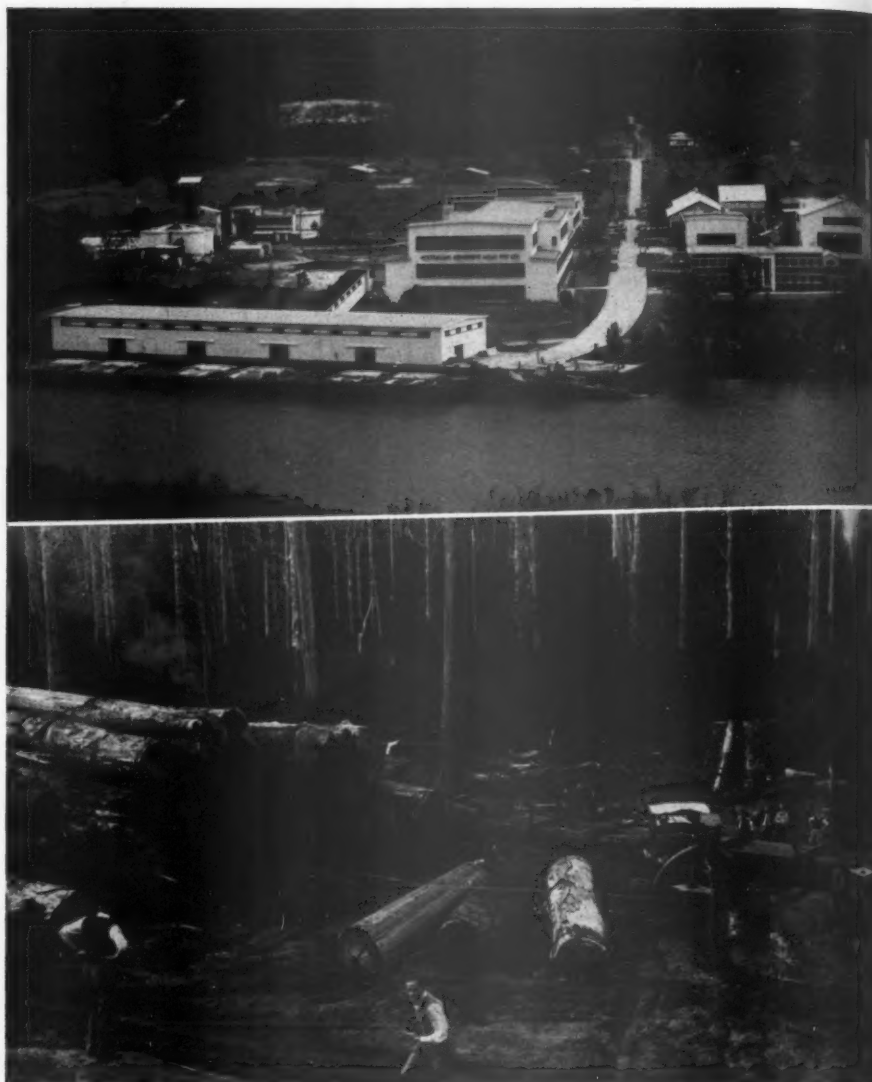
Experiments in the Derwent Valley area showed that newsprint of satisfactory quality could be produced on the basis of approximately 80% of Australian groundwood and 20% of imported Canadian sulfite pulp.

The industry was virtually pioneered by two companies, The Herald and Weekly Times Ltd., of Melbourne, and John Fairfax & Sons, Pty. Ltd. of Sydney, but by 1937 practically all the major newspaper proprietors of Australia had indicated their willingness to join.

Erection of the mill at Boyer on the River Derwent began in 1939. Production last year was 31,670 tons. Present consumption of newsprint in Australia is rationed and about 174,000 tons was used last year. To boost Australian production to 80,000 tons new finance is being obtained by the company, including 1,000,000 Australian pounds (\$3,200,000) by the issue of 4½% cumulative preference shares.

The mill at present operates on a 7-day production cycle, shutting down each Wednesday for eight to ten hours for essential maintenance and checkup on all equipment. This cycle may be extended to nine to ten days at a later date.

Logging operations are under control of



AUSTRALIA NEWSPRINT MILLS LTD., at Boyer, Tasmania, the only newsprint mill in Australia. Below, a sample stand of *Eucalyptus regnans*, or swamp gum, and logging operation. Note size of men compared to timber. This timber is made into groundwood and mixed with Canadian sulfite pulp.

foresters. Cutting is planned to provide for sustained annual yield and silvicultural rules are observed to ensure satisfactory regeneration. The company maintains its own forest fire control organization.

The expansion program on which the company has now embarked will involve 3,000,000 pounds (nearly \$10,000,000). Works in hand include new logging roads and equipment, a new woodmill, a second paper machine, together with necessary additions to grinders, screen room equipment, beaters, storage tanks, etc.

To maintain timber supply for increased production, it is necessary to open up the Florentine Valley in the company concession area. This is being done by means of

a main logging road with feeder roads. The length of main logging road into the center of the Florentine Valley will be about 30 miles, but it will pass through belts of timber along the route. This scheme makes provision for 70 million board feet of logs (140,000 cords) to be delivered to the mill per annum as against 27 million board feet at present.

The new woodmill will initially include a 10-ft. bandsaw with all equipment designed to take 20-ft. logs up to 7 ft. diameter. From the bandsaw, logs will be broken down through an edger and slashers saws to billets 4 ft. long and 7 inches square. At a later stage, the existing woodmill will be transferred to the new site and a second production line will be

RAYONIER
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WOOD CELLULOSE ► *is dependably uniform*

Rayonier's wood cellulose is supplied in several grades to provide the special characteristics required for manufacture of the various types of products in which cellulose is used.

Quality control in production of these high-alpha grades of cellulose assures the constant purity and uniformity required in making viscose and acetate fibers, cellophane, and various cellulose derivatives.

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Principal Grades of Rayonier Wood Cellulose



"RAYACETA" is a highly purified wood cellulose specially developed for the production of cellulose acetate fibers. It also is used in the manufacture of acetate films and sheets for packaging purposes.



"RAYOCORD" wood cellulose is a highly purified product especially suitable for the production of viscose yarns of high tensile strength. It is widely used in the manufacture of tire cords and for textile yarns where maximum strength is desired. It is also a good material for the production of saturating papers and vulcanized fiber.



"HICOLOR" is an established grade of purified wood cellulose for the production of viscose fibers and yarns of high quality. It is also used as a base material for vulcanized fiber and related products.



"RAYAMO" is a wood cellulose specially developed for the making of cellophane, used increasingly as a protective covering for fruits, vegetables, cigarettes, candy, and numerous other packaged articles.

EXECUTIVE OFFICES: 122 East 42nd Street, New York 17, N. Y.
MILLS: Hoquiam, Port Angeles, and Shelton, Washington; Fernandina, Florida.

installed.

Grinder room extensions include the installation of seven Tidmarsh ring grinders driven individually by 2500 H.P. motors. Artificial grind stones 62-inch diameter by 52-inch face operating at a peripheral speed of 5000 f.p.m. will be installed. Each of these grinders is expected to produce 25 tons of pulp per day as against 13 tons produced by the existing Great Northern grinders.

From the grinders crude pulp will be screened in three Stadler bull screens and will then be pumped to three Impco vacuum washers, 8 ft. diameter by 14 ft. long (plus one standby unit). Refining will be carried out in three standard Cowan screens which replace the Trimbey senior screens used at present. Refined stock will then flow to 15 gravity deckers and thence to storage in eight concrete tanks, capacity 120 tons of pulp.

Two bale pulpers will slush Canadian sulfite pulp bales and the slushed sulfite will be beaten in two Morden Machine Co. (Portland, Ore.) Stock Maker units (plus one standby). The Morden units replace standard hollanders.

Mixed stock will pass to No. 2 paper machine without jordaning. Final screening will be carried out on four Type 3A Bird Machine Co. (South Walpole, Mass.) screens with space for a fifth which may be necessary when machine speed approaches designed maximum.

The paper machine will be 246-inch wire width designed for a maximum operating speed of 1500 f.p.m. Main features are a 100-ft. machine wire, 44-inch couch roll with double vacuum box, two 38-inch presses, 48 dryers, and a calendar stack with 34-inch diameter bottom roll. The winder will be designed to operate at up to 4,000 f.p.m. All of the equipment from slice to winder will be supplied by Dominion Engineering Works Ltd. and the Harland Engineering Works, Scotland, will supply the drive.

Other additions include a new engineering shop, water treatment plant, and a 60,000 lbs. per hour boiler, added to the existing two 30,000-lb. boilers.

Chemical pulp, varying from 19% to 22% of furnish, is Canadian hemlock sulfite. Within a few years the company may install its own chemical pulping plant to supply portion of its needs from local wood.

There is an assured Australian market for the whole output. With newsprint in free supply it is estimated total consumption would rise to 250,000-280,000 long tons per annum. Boyer production cost is below present landed cost of imported newsprint.

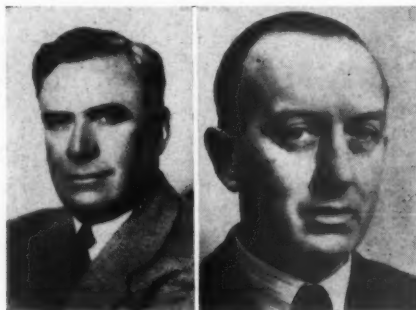
New No. 7 Digester

Completion of No. 7 digester recently marked another step in Powell River Co.'s expansion program. The new digester, built by B. C. Bridge & Dredging Co., with steel work handled by the E. Bickerton Co., has a capacity of 11 tons of sulfite pulp each eight-hour cook and features the latest instrumentation.

The new digester assisted in maintaining production during the shutdown of No. 5 digester for a re-lining job.



LEADERS OF AUSTRALIA'S TAPPI met in April at Hobart, Tasmania, to discuss technical problems. Here are some of the officers of the technical association (left to right)—G. W. Ellis, president; H. B. Somerset, vice-president; E. P. O'Leary, secretary; G. H. Wiltshire, the association's first secretary.



SIR KEITH MURDOCH (left), Chairman of Australian Newsprint Mills, Ltd., and also Chairman of the Herald and Weekly Times of Melbourne, which helped pioneer the newsprint industry in Australia. S. L. KESSELL (right), former State Conservator of Forests in Western Australia, who is Managing Director of the newsprint operations.

Australian TAPPI Holds Second Convention

President G. W. Ellis presided at the second general conference and annual meeting of the Australian Pulp and Paper Industry Technical Association in Hobart, Tasmania, April 12-14. Reports on the first meeting were published in **PULP & PAPER** last year.

Five technical sessions were held and on the final day delegates made an inspection trip to the Boyer mill at Risby's Basin woods operations as the guests of Australian Newsprint Mills Ltd.

The technical sessions included symposia on wood preparation, on laboratory beaters and their correlation with mill beaters, and on mill stock preparation. There was also discussion on logging, surface sizing on paper machines, pumping of eucalypt pulps and their flow in pipes, the physiological aspects of pulp and paper mill design, the Harland drive for paper machines, boiler feed water treatment and materials handling.

The meeting was attended by about 85 mill representatives and sustaining members from Victoria, New South Wales, New Zealand and Tasmania.

Of fundamental importance to the Australian industry is the development of standard nomenclature, methods of testing and specifications. On these matters the association has been invited to co-operate with the Papermakers Association of Great Britain and Ireland, the Canadian Pulp and Paper Association, TAPPI and the FAO of the United Nations.

To this end a testing committee was set up and its sessions were held in Burnie, Tasmania, during the week commencing April 5 concurrently with the ninth annual Pulp and Paper Co-operative Research Conference.

New Capacities At Fraser Mills

Expansion of the activities of Fraser Companies, Ltd., and subsidiaries in New Brunswick and Maine is reflected in revised capacity figures.

The company's new pulp mill at Newcastle, N. B., is being designed to manufacture approximately 120 tons daily of unbleached kraft and is now expected to be in operation some time in 1949.

New capacities: Edmundton, N. B.—high-grade unbleached sulfite pulp 105,000 tons annually, of which 80% is bleached; paperboard 20,000 tons and groundwood pulp 35,000 tons per annum. Madawaska—high-grade sulfite papers 75,000 tons and catalogue paper 42,000 tons per annum. Athol, N.B.—bleached sulfite pulp 60,000 tons per annum.

Paraffine Companies In Big Expansion

Work is progressing on the construction of the first unit of a four to five million dollar plant expansion at The Paraffine Companies huge 1,600 employee linoleum, paint, and roofing plant at Emeryville, Calif., across the bay from San Francisco.

The new construction includes the expansion of the high pressure steam plant, and electrical manufacturing facilities, and increases the capacity of the felt mill, floor covering, roofing, linoleum, and paint manufacturing departments.

Included in the program is construction of one of the most modern and largest industrial research laboratories in the nation. This addition will bring total expenditures of the previously announced additions to possibly six million dollars.

New B-M-T Division

A new division of Blake, Moffitt & Towne has been opened in Santa Rosa, Calif., according to announcement by O. W. Mielke, general manager. The Santa Rosa division, 17th in the Blake, Moffitt & Towne chain will carry warehouse stocks of paper, paper products and twine. Appointed manager is Arthur S. Andersen.

PENNSALT

Liquid Chlorine

What does it do for you?

Obviously, chlorine is essential in bleaching paper pulp. But is that all it does for you?

How about your drinking water? Chances are chlorine serves as a sanitizing agent.

And your clothes . . . very likely that crisp, fresh shirt you put on this morning was laundered with the aid of chlorine-based bleaching compounds.

Then there's the meat, fruit, vegetables and other foods you eat. Chlorine is a basic ingredient in the DDT, Benzene Hexachloride and many other insecticides that help protect food crops from bug pests.

Yes, Pennsalt chlorine serves you in many varied ways . . . and at Pennsalt's extensive Whitemarsh Research Laboratories, new uses for Pennsalt chlorine are constantly being probed.

Pennsalt chlorine is manufactured at Wyandotte, Michigan; Tacoma, Washington; Portland, Oregon and is available from warehouses in your own locality. Pennsylvania Salt Manufacturing Company of Washington, Tacoma, Portland, Ore.



STATISTICAL QUALITY CONTROL

Applied to Insulating Board Industry—Shibley Contest Paper

By Thomas W. Nicholson

Woodfiber Division, Simpson Logging Co., Shelton, Wash.

The purpose of this paper is to encourage the use of quality control procedure in the insulation board and pulp industry. Use of this technique can be employed to simplify interpretation of data, process control, and therefore the quality.

Quality Control

Statistical quality control is based on the assumption that all manufacturing processes are variable and that only a certain degree of perfection may be reached. The limits of perfection due to variations known as chance causes over which man has no control. Variations outside of this system are the result of man's actions and are known as assignable causes. There may be traced and eliminated.

When a process is operating under chance causes, some deviation from the mean operating line will be experienced. The process is then considered to be "in control" and man has no power to bring the process nearer to the mean. However, suppose an assignable cause is injected into the process—for example—consider the case of a partially shorted out rheostat for speed control of a centrifuge used for the preparation of consistency and freeness samples. This would give faulty peripheral speed and hence incorrect sample weight, freeness, consistency, etc. This would be carried throughout the process. Production based on these tests would naturally deviate from the mean to a greater extent than if only chance errors were present.

What does quality control do? Quality control sets up a universe (a sequence of measurements or numbers which is either completely known or about which reasonably valid predictions can be made) of its own through this universe makes such predictions as:

1. Improvement in quality.
2. Reduction of inferior production.
3. Optimum adequate inspection system.
4. Natural tolerances.
5. Ability of products to meet specifications or to predict specifications.

No manufacturing process will operate at highest performance without continuous control and adjustment. Corrective action at the right place and at the right time is the key to the situation. Quality control if exercised judiciously can accomplish this.

The Control Chart

The power of the control chart lies in its ability to separate out the assignable causes of quality variation. This makes possible the diagnosis and correction of many production problems and often brings substantial improvements in product quality and reduction of spoilage and rework. By identifying certain of the quality variations as inevitable chance variations, the control chart tells when to leave a process alone and thus prevents unnecessary frequent adjustments that tend to increase the variability of the process rather than decrease it.

The control chart in actuality is very simple. Along the y axis is plotted the variable group

Celebrates Its Birthday

Simpson Logging Co., Shelton, Wash., celebrated the first anniversary of its Woodfiber Division, which produces insulation board products from "left-overs" of its sawmills and plywood plant, with a dinner on Mar. 25.

William G. Reed, board chairman, lit a big green candle and Carl J. Macke, vice president and Woodfiber manager, cut a birthday cake, and President C. H. Kreienbaum, made a talk. The plant, operating 24 hours every day, employs 250.

TOM NICHOLSON, who presented this paper before TAPPI in Camas, Wash., Jan. 16, 1948. Shibley Contest Winner will be announced at Coast TAPPI-Supts. Ore., May 6-8. All other papers entered in the contest have been published in previous issues during past year.



such as basis weight, density, etc. Along the x axis is plotted time, number of measurements, etc. This chart is divided into two sections:

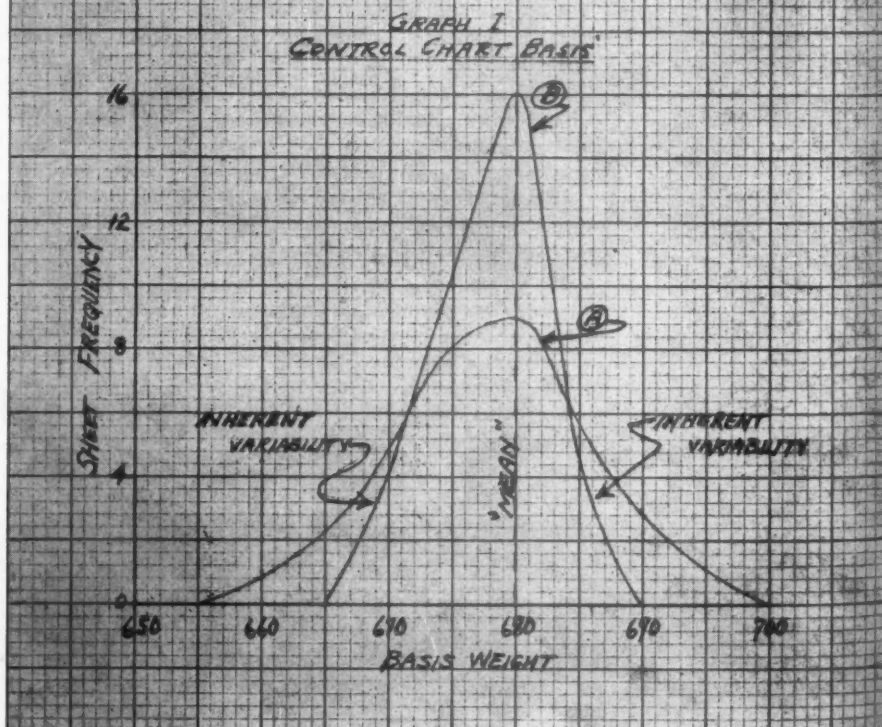
a. X Bar (\bar{X}), or the arithmetic average value of the variable quantity.

b. Range (R), or the arithmetic difference between maximum and minimum value of the quality measured.

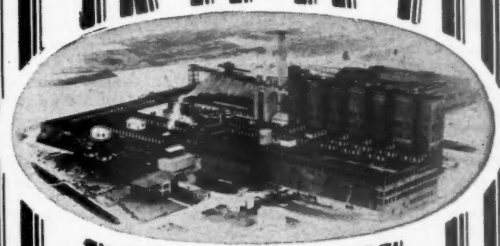
It has been discovered that even if the distribution of measurements from a process is abnormal a nearly normal distribution may be obtained by averaging small successive subgroups of the data and making frequency distribution plots of the averages. An example of this is shown in Graph I, plotted from data in Table I.

TABLE I
EXAMPLE OF FREQUENCY DISTRIBUTION

BASIS WEIGHT RANGES	(A) OCCURRING FREQUENCY	(B) FREQUENCY WHEN GROUPED IN GROUPS OF FOUR	(C) FREQUENCY WHEN GROUPED IN GROUPS OF FOUR
650-655	0	0	0
655-660	1	0	0
660-665	2	0	0
665-670	4	1	0
670-675	6	2	0
675-680	9	4	0
680-685	16	1	0
685-690	3	0	0
690-695	1	0	0
695-700	0	0	0



SOUNDVIEW



High Grade

**BLEACHED
SULPHITE PULP**

**SOUNDVIEW PULP COMPANY
EVERETT WASHINGTON**



MAY, 1948

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Curve B, Graph I (obtained by subgroup frequency) is in effect curve A with the extremes of variability averaged out. What is left between the extremities of the two curves is known as the inherent variability of the process. Thus, a means of expressing the normal condition of the "normal" condition of the process has been determined. Now it may be assumed that any average of subgroups of four tests which deviates further than the determined mean average is not the result of random causes but instead due to some external causes.

Subgroups should be chosen in such a way that makes each subgroup as homogenous as possible and that gives the maximum opportunity for variations from one subgroup to another. A size of four is better than three or two on statistical grounds as the distribution of \bar{X} is nearly normal for subgroups of 4 or more even though samples were taken from a non-normal universe.

Setting Up the Control Chart

To begin the control chart at least 30 and preferably more values should be at hand. These are then split into subgroups and \bar{X} and R determine for each. To obtain the grand average, $\bar{\bar{X}}$ and \bar{R} , all \bar{X} 's and R 's are averaged, $\bar{\bar{X}}$ then is the best estimate we have of an infinite number of measurements. Likewise \bar{R} is the best estimate of variance. However, from a table containing corrections factors for estimating a "statistic of a normal universe" from the corresponding statistics of a small sample or subgroup, the value X' ; (true average result of the universe) δ (The universe standard deviation) and the tolerance may be set up.

The formulae involved in such calculations for the universe are few and simple (Note: A_2 , D_4 , D_3 and d_2 , are corrections factors taken from the A.S.T.M. table, "Factors for Comput-

ing Control Chart Lines." (1)

1. Limits of $\bar{X} = \bar{\bar{X}} \pm A_2 \bar{R}$.

2. Limits of $R = D_4 \bar{R}$.

3. Universe Standard Deviation $\delta = \frac{\bar{R}}{d_2}$.

4. True average result of universe $X' = \bar{\bar{X}} + 3\delta$
 $\sqrt{N-3}$

when N is the number of subgroups.

5. Rejection limits $= \bar{\bar{X}} \pm 3\delta$.

For example, for a certain month the bone dry weight data was determined to be:

a. $\bar{\bar{X}} = 736 \text{ \# / M ft.}^2$.

b. $\bar{R} = 49$.

c. $N = 162$ groups of 4.

1. Limits of $\bar{X} = 736 \pm (0.729) (49) = 700$ to 772 .

2. Limits of $R = (2.282) (49) = \begin{bmatrix} 112 \\ 0 \end{bmatrix}$

3. $\delta = \frac{49}{2.059} = 23.8$

4. $X' = 736 \pm \frac{(3) (23.8)}{\sqrt{162-3}} = \begin{bmatrix} 742 \\ 730 \end{bmatrix}$

5. Rejection or 3σ limits $736 \pm (3) (23.8) = \begin{bmatrix} 807 \\ 665 \end{bmatrix}$

Once the mean value and limits of the quality measured are determined, all that has to be done is to maintain production within these limits. Plots will show when to adjust machinery and when to begin looking for trouble.

Application to the Insulating Board Industry

Due to the large number of variables in any pulping and sheeting process, the statistical

concept of control runs into many difficulties not experienced in fields of "continuous output."

When the Woodfiber Division mill was designed and set up it was agreed to use as few expensive automatic control regulators as possible, since many mills are over instrumented and do not use all their instruments. Instead, the pulping, pH, sizing, etc., was hand-tested as frequently as necessary. All the output was tested on an hourly basis and recorded on a tabulated form (Chart I) with the intention of accumulating a mass of data to analyze for periodic or pertinent trends in the operation. This was done for several reasons:

a. Most personnel were entirely new to this process having been transferred from other company divisions. Thus, it was felt that manual controls would better give the personnel the feel and understanding of the process.

b. The rather small pulp storage did not particularly lend itself to the controls.

c. Controls were to be established after a period of production at those points pertinent to the production of uniform product.

In the beginning an inspection department was set up, one station at the dry end and the other at the wet end. The dry end made all strength, weight, density, moisture, and water absorption tests, while the wet and recorded pH's, freeness, consistency and machine speeds. As a result, large volumes of data were recorded. Due to changing production and the inherent pulping variables it was difficult to obtain a true picture of the process.

In any organization there is a purpose for taking mass data. However, often such valuable data is either superficially scanned or filed away with practically no examination. This is natural, for an exacting analysis would require much time. Thus, a statistical study of plant data was begun a short time back and graphs

INSULATION DEPARTMENT INSULATION BOARD MILL																			
BOARD FORMER										FINISHED BOARD									
Time		Copper, mils			Thickness			Weight, lb. per sq. ft.			Copper, mils			Trans. Lead			Moisture, %		
No.		Front	Mid	Back	Front	Mid	Back	Front	Mid	Back	Front	Mid	Back	Front	Mid	Back	Front	Mid	Back
8.5 345 WT. CAL. 11/10/54																			
CHART I																			
1	8:00				741	502	17.8	780		780	508	500	15.5	13.5	95.0		93.4	6.6	7.8
2	9:00				760	504	18.0	800		800	510	500	16.1	13.6	94.4		93.7	7.9	
3	10:00				712	493	17.4	742		747	500	497	15.3	12.2	94.8		95.2	8.0	
4	11:00				713	486	17.7	780		729	489	487	14.4	11.6	95.9		96.0	9.0	
5	12:00				762	521	17.7	779	779	789	523	520	14.7	11.0	96.0	95.8	96.0	8.0	
6	1:00				740	506	17.8	820		825	522	521	14.7	11.3	90.4		91.9	8.0	
7	2:00				723	491	17.7	789		780	506	502	15.4	12.3	92.0		92.0	6.5	
8	3:00				723	502	17.3	750		763	508	506	15.2	12.4	95.7		96.0	5.5	
9	4:00				712	493	17.4	742		747	500	496	16.0	13.2	95.9		96.0	7.0	
10	5:00				700	496	17.0	729	732	730	502	500	15.4	11.9	96.0	95.7	95.5	6.8	
11	6:00				727	517	17.0	770		768	522	521	15.4	11.5	95.3		94.9	8.5	
12	7:00				695	502	16.8	734		731	508	501	15.6	11.9	96.0		95.8	7.0	
13	8:00				690	495	16.8	721		726	500	496	15.6	12.6	96.4		96.9	9.0	
14	9:00				718	509	16.7	750		760	514	513	15.6	11.3	95.8		95.6	6.5	
15	10:00				720	495	17.0	730	733	739	499	492	16.5	11.8	96.0	96.0	92.7	9.3	
16	11:00				708	486	17.5	777		785	506	505	16.7	12.0	92.7		94.4	7.7	
17	12:00				700	486	17.3	744		754	500	503	15.0	11.8	95.2		94.9	6.0	
18	1:00				712	493	17.3	733		735	496	495	15.4	12.0	95.5		94.8	6.5	
19	2:00				721	501	17.3	750		764	501	501	16.3	12.3	95.0		94.4	5.8	
20	3:00				711	498	17.1	770	768	773	515	510	15.5	11.8	93.7	94.0	93.4	6.5	
21	4:00				691	494	17.1	759		765	511	507	15.3	12.0	93.9		95.2	7.2	
22	5:00				689	489	16.9	721		728	495	492	15.1	11.8	95.7		96.0	5.0	
23	6:00				689	492	16.8	709		717	494	492	14.8	11.6	96.0		96.0	5.0	
24	7:00				690	487	17.0	718		718	494	485	15.1	11.7	96.0	95.5	95.7	7.0	



The Governor of Utah *invites You*



STATE OF UTAH
OFFICE OF THE GOVERNOR
SALT LAKE CITY

HERBERT B. MAW
GOVERNOR

To American Industry:

The State of Utah takes pleasure in presenting to American Industry an opportunity for new development and expansions.

The State of Utah prides itself on the quality of its people, the tremendous extent and ready availability of its raw materials, its unlimited power resources, its unequalled transportation facilities, and its friendly attitude toward business.

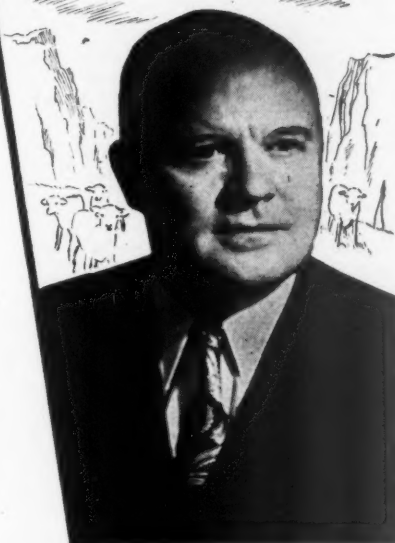
These factors, together with the advantages of living under ideal home surroundings in the nation's most interesting area, has already induced many fine industries to locate in our State.

A new industrial economy is developing in our commonwealth based on the substantial foundations of the basic materials available and the happy and contented people constituting the human resources.

The establishment of your business in Utah will give you an opportunity to share in this new industrial economy and to participate in the growth already experienced in the west.

Sincerely yours,

Herbert B. Maw
Governor



Herbert B. Maw

* One of a series of advertisements based on industrial opportunities in the states served by Union Pacific Railroad.

Unite with Union Pacific in selecting sites and seeking new markets in California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, Oregon, Utah, Washington, Wyoming.

*Address Industrial Department, Union Pacific Railroad
Omaha 2, Nebraska

UNION PACIFIC RAILROAD

Road of the Daily Streamliners

MAY, 1948

69

posted in the mill for inspectors to record hourly test data on a 1-week sheet graduated in hourly intervals. This gave the operators a somewhat clearer idea of what was happening to the process as trends were shown on easily "followable lines" rather than being buried in a mass of figures. It permitted management to spend time on data interpretation, and at the same time observe any unusual deviation from specification limits.

Quality control applied to our process has lived up to its expectations, namely, showing the true state of normal production. Definite quality improvement has been noted and predicts no trouble in meeting specifications under the present operating conditions.

Examples of information gleaned from our quality control plot show:

1. Although basis weight and density has a decidedly downward trend during the past several months, tensile and flexure strengths have an upward trend. Thus process economy is increasing as well as personnel experience.

2. Inadequate sizing was discovered at one point and the cause corrected.

3. Product variation has decreased a substantial amount, while product quality has improved and production increased.

4. Product variation after plant shutdowns and startups has decreased, showing the personnel are rapidly becoming more experienced.

5. Limits applied to ranges show the period from midnight to 8 a.m. to have the greatest variability within the subgroup. This perhaps should be expected on the graveyard shift!

6. The strength curves strongly follow the basis weight and density curves over a long period of time. This indicates that more time should be spent on density and weight tests rather than strengths. However, strength tests cannot be abandoned entirely.

7. Limits of \bar{X} and R will change as the process changes and thus should be checked from time to time and new limits computed.

Excerpts from our control chart covers a normal operating period and two tests of new sizes. From this chart the following facts are immediately evident:

1. Size "A" and size "B" do not produce as adequate sizing action as the present size being used. Neither would offer security in ability to meet specifications.

2. Although basis weights were much lower in the sizing tests, strengths remained steady or increased. Thus, a means of increasing board strength has become available should it ever be desired.

3. Water absorption values entirely out of line occurred on the 6th day of normal operation. Checking for the trouble revealed that size being shipped in tank cars had separated in layers. An agitation schedule was set up and sizing returned to normal.

4. Size "A" showed the least variation in product.

With the control chart as a basis then we could unhesitatingly reject the adoption of either of the new sizes. Such an example is one of the least publicized values of statistical control.

Summary

It is obvious that statistical quality control can be used to advantage. The system is easy to learn and simple to operate. Advantages are numerous, the chief ones being:

1. Improvement of quality.

2. Establishment of the normal plant process conditions and its limitations.

3. Increasing plant efficiency and profit.

Such a system is finding its place in industry each day and it is predicted that the advantages of statistical quality control will be recognized and adopted by more and more mills

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*"A.S.T.M. Manual on the Presentation of Data, Supplemental B," pg. 50, Philadelphia 1945

**Dudley, J. W. "Examination of Industrial Measurements" First Ed. pp-1-57 New York, 1946.

Downingtown Machine

Biggest machine of its type on board is the new 160-inch Downingtown board machine making .25 gypsum board at the U. S. Gypsum plant in Los Angeles.

Plaque for War Dead

Crown Zellerbach Corp., Camas, Wash., has established a war memorial honoring 22 former employees of that mill who lost their lives in armed forces service during World War II. Of those killed, there were 21 men and one woman. The memorial, at the mill entrance, is a bronze plaque, mounted on native stone, with names of these former employees engraved thereon.

U. S. GOVERNMENT PRINTING OFFICE production for the fiscal year 1947 shows a \$53,000,000 volume of public printing, more than double prewar requirements. And, says the office, there just isn't any chance for reduction of volume in the near future, if at all. The Congressional Record reached a number of new highs and Congressional printing appears on the increase. Printing for the Vets Administration, Department of Agriculture and Post Office is greater than in wartime.



652

World War II Veterans
306 "OLD TIMERS"

There's plenty of "know-how" in the Puget Power organization. 306 members of our family wear 25-year service pins and many more will move into the "old-timer" group before long. But, there's a lot of vigorous young blood in our organization too — 652 veterans of World War II, 192 of whom were employees before entering service. Together Old Timers and Vets make a great team in the service of Puget Power customers.

**PUGET SOUND
POWER & LIGHT CO.**

FRANK McLAUGHLIN, President

OLIVER UNITED FILTERS INC., with factories in Oakland, Calif., and Hazleton, Penn., recently held an "Old Timers" get-together at each plant. Employees who have been with the company for ten years or more total 224 out of a total employment of 550.

BROWN INSTRUMENT CO. has opened a new district office at 922 Dermon Building, Third and Court Streets, Memphis, Tenn., it was announced by W. H. Steinkamp, field sales manager for the industrial division of Minneapolis-Honeywell Regulator Co.

E. C. ATKINS & CO. have moved from 239 Canal St. to 307 Balter Building, New Orleans, from which sales in the southwest territory (Louisiana, Texas and south Arkansas) will be directed by H. (Pete) Waddle. Robert M. Gaunt has recently been named salesman for the south Texas territory under the New Orleans office. He will work as far north as Lufkin, Tex.

AN INTERESTING EXHIBIT by Hollingsworth & Whitney, Boston, was a feature of the National Paper Trade Association convention held at Hotel Barclay, New York, the week of April 5th. Various paper products of the company were shown, and lines converted from H&W paper. As in the past, members of the company's various sales divisions were present and a general sales meeting was held at 230 Park Av., the company's New York office.

WANTED, experienced Tour Foreman. Must be thoroughly acquainted with all phases of Unbleached Kraft Pulp Mill. Mill situated on Canadian West Coast. Reply box 7, Pulp & Paper, 71 Columbia St., Seattle 4, Wash.

FOR SALE

Available for Immediate Shipment

1 Used 110" left hand chipper with multiple manila rope drive and 200 HP .80 PF 600 RPM synchronous motor. 21" wide square type spout, cast steel 4-knife disc with renewable face plates and knife carriers. Fan blades on disc for overhead discharge. Timken bearing arbor. Motor 3-bearing type with sliding base and including direct connected exciter. Current characteristics 2200V 3-phase 60 cycles. Rope drive ratio for 200 RPM disc speed. Further information and outline dimension drawings will be furnished immediately upon request.
Soundview Pulp Company, Everett, Wash.



RUBBER COVERED CONVEYOR BELT

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PAPER MILL HOSE

YARWAY STEAM TRAPS

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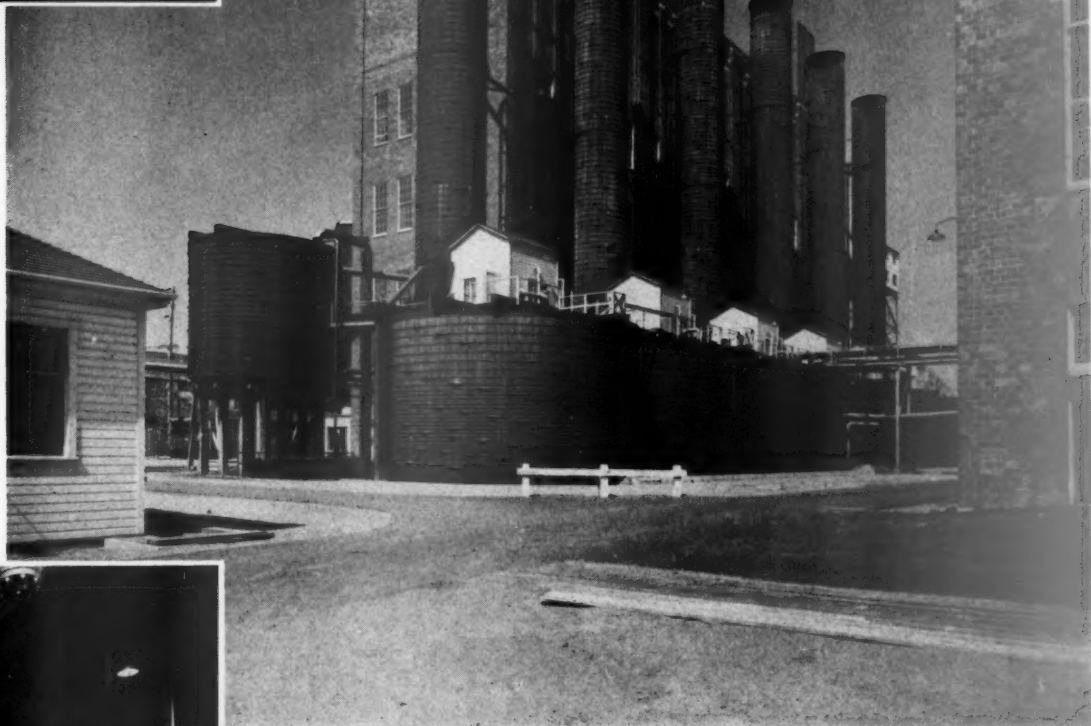
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PORTLAND, OREGON

AIDS TO DIGESTION AT PUGET



BLOW PITS AND VOMIT STACKS IN FRONT OF THE DIGESTER BUILDING, WITH WASTE SULPHITE LIQUOR TANK SERVING THE ALCOHOL PLANT ON STILTS AT LEFT. THE DIGESTERS RUN THROUGH THIS BUILDING FOR A TOTAL HEIGHT OF MORE THAN FOUR STORIES.

Puget Pulp has six digesters, with a combined volume of 60,000 cubic feet. After digesting for a period of eight hours, the pulp goes through a series of washing, cleaning, and screening operations, to maintain Puget's standards.



Tapering shapes coming down from the ceiling are the bottoms of chip bins, from which chips are emptied into the digesters, tops of which are seen extending above the floor.

AMERICA'S LARGEST
PRODUCER OF UNBLEACHED
SULPHITE PULP

CAPACITY:
125,000 TONS ANNUALLY

**PUGET SOUND
PULP & TIMBER COMPANY**

BELLINGHAM • WASH.

Florida Mill Paper

MARKS 5TH YEAR



RAYONIER HOUSE ORGAN PARTY IN FLORIDA: Top, l. to r.: J. H. LaChance, Supt.; Mrs. Chance, and Kent Crisp, Machine Room Editor for the Ray-O-Sun. Second row, l. to r.: Nelle and Andy Ryfun, Co-editors of Ray-O-Sun; Nard Jones, PULP & PAPER, and Ray Shrigley,

Personnel Director of the mill, at the piano. Bottom, standing: Buell Crisp, Acid Plant; Mr. Ryfun; Norman Henderson; George Golden, Safety Supervisor; seated, Miss Olive Galphin, Office News; Mrs. Norman Henderson, Paint Shop News.

Late in March the staff of Ray-O-Sun, lively house organ of Rayonier Inc., at the Fernandina mill, had their annual dinner which celebrated its fifth year of publication. Its first editor is still the same man:

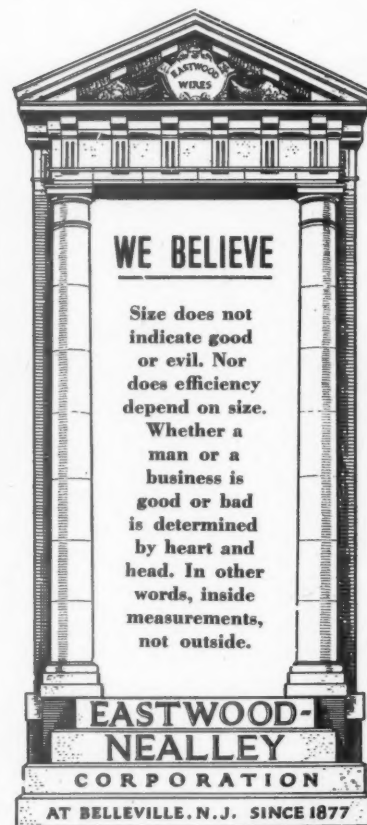
Andy Ryfun, of the laboratory division. Properly enough, his co-editor is Mrs. Ryfun.

But he has other help, too. Present at the annual dinner were: Mr. and Mrs. Ray Shrigley (he is person-

nel director); Mr. and Mrs. J. H. La Chance (superintendent); Geo. Golden (safety supervisor); Mr. and Mrs. L. S. Grant (he writes the Pipe Shop's *Stripped Threads* in Ray-O-Sun); Mr. and Mrs. Kent Crisp (machine room's *Roll to Roll*); Mr. and Mrs. Norman Henderson (paint shop's *Brush Marks*); Miss Olive Galphin (*Office News and Views*); Buell Crisp (digester and acid plant's *What's Cookin'?*); Carl Borges (carpenter shop's *Chips and Shavings*); and Grady Kennedy (finishing room's *Highlights*) who also entertained on the harmonica.

Guests included Mr. and Mrs. Lloyd Wolters (he sang and played the banjo); Mr. and Mrs. Louis Ferreira (he played his own compositions on the piano); and Nard Jones an associate editor of **PULP & PAPER**.

PENNSYLVANIA SALT MFG. CO. will build a new fluorine chemicals plant near Paducah, Kentucky. The plant will be in close proximity to the rich Kentucky and Illinois fluor-spar deposits, in which Pennsalt has reserve interests. Other Pennsalt plants are located at Natrona, Pa.; Easton Pa.; Cornwells Heights, Pa.; Wyandotte, Mich.; Tacoma, Wash.; Portland Ore.; and Bryan, Tex.



PULP & PAPER



Louis Bloch, chairman of the board, Crown Zellerbach Corp., third from left, congratulated James Lynch on completing 35 years of service with Crown Willamette Paper Co., Los Angeles. Occasion was service pin dinner at Mayfair Hotel, Los Angeles, March 27. In group are employees receiving pins for 25 years and up and executives; Samuel Gravino, Daniel Chacon, Mr. Bloch, Henry Cruz, Joseph Cusimano, Mr. Lynch, Lester E. Remmers, Los Angeles manager, J. Y. Baruh, vice president, C-Z Corp., at Los Angeles; and Joseph La Puma.

Service Pin Awards At Los Angeles Mill

The annual service pin dinner of Crown Willamette Paper Co., was held at the Mayfair Hotel, Los Angeles, March 27, with Louis Bloch, chairman of the board, Crown Zellerbach Corp., as honor guest. Also honored was J. Y. Baruh, C-Z vice president at Los Angeles. Lester E. Remmers, manager of operations for Crown Willamette at Los Angeles was toastmaster with Mr. Bloch presenting the service pins.

Following the showing of a new C-Z industrial film, "Fresh and Good Looking," dealing with preservation and packaging, Mr. Bloch addressed the group. Other speakers were William D. Welsh, execu-

tive assistant; Charles Gargaro, president of the local P.S. & P.M.W. union, and Arthur W. Ponsford, Southern California editor, Pulp & Paper.

Service pins awards included: For 35 years, James Lynch; 30 years, Joseph Cusimano; 25 years, Daniel Chacon, Henry Cruz, Samuel Gravino, Joseph La Puma; and 20 years, Chester Gunther and Lewis Enna.

A NEW TECHNICAL Service Bulletin entitled "Ethocel Hotmelts for Paper Coatings" is available at Dow offices throughout the country or by writing Coatings Section, Plastics Div., The Dow Chemical Co., Midland, Mich.

Importance of Clay Inventories Stressed

At a joint meeting of the pulp and paper buyers committee of the National Association of Purchasing Agents and the materials committee of the American Paper & Pulp Association, recently in New York, of which Earle Weaver, manager of purchases of International Paper Co., was chairman; David Murchison, sales manager of Georgia Kaolin Co., spoke on the subject of china clay.

His remarks were confined principally to the serious handicaps encountered, in both the mining and processing conditions, in the South this winter, and the importance of adequate inventories of clay at paper mills to avoid shutdowns caused by curtailment of clay shipments or delays to cars in transit.

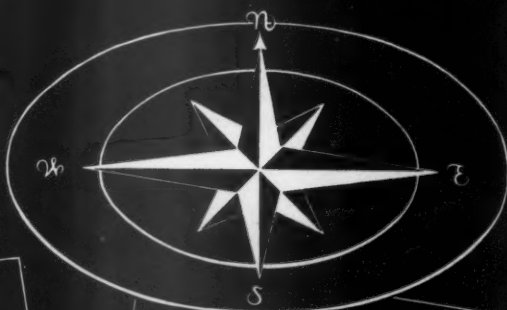
Mr. Murchison stressed the many hardships occurring in the mining operation, caused by prolonged rains and many weeks of continued freezing weather. The other important contributing factor to lowered production, he said, was the curtailment of natural-gas supplies necessary to the drying and conditioning of all grades of clay and the difficulty of securing sufficient fuel oils to make up for the lack of gas.

A NEW 12-PAGE BULLETIN No. EDJ-1012, replete with maintenance data pertaining to the Jones High-Speed Refiner, has been published by E. D. Jones & Sons Co., Pittsfield, Mass.

Pulp and Paper

**LYDDON
& COMPANY
(AMERICA) INC.**

EXPORTERS OF WOOD PULP
TO BRITAIN, SOUTH AMERICA
AND ALL OTHER WORLD MARKETS



**PARSONS &
WHITEMORE**

INCORPORATED
WOOD PULP
WORLD-WIDE
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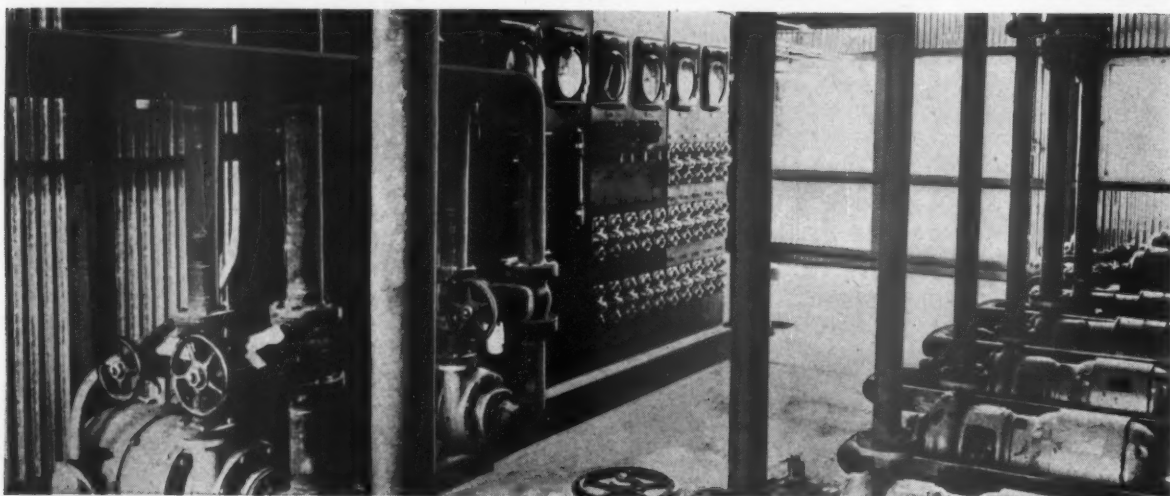
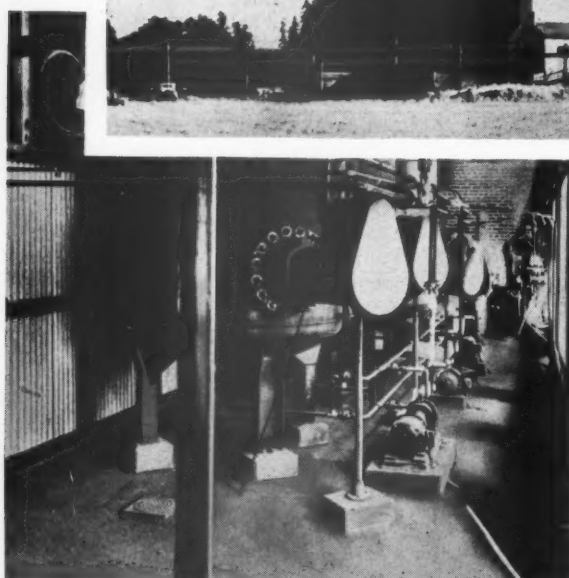
10 EAST 40TH STREET, NEW YORK 16, N. Y.

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Pioneer a New Industry...

Turn wood waste

*NEW-TYPE INDUSTRIAL
ALCOHOL PLANT
AT SPRINGFIELD, OREGON
NOW FOR SALE OR LEASE*



into Profit Dollars



To Men of Vision, Ingenuity and Commercial Daring, this Plant offers Great Potential Rewards

THE AGE-OLD PROBLEM in all lumbering operations is the extravagant waste that inevitably accompanies them. Even with the best of modern methods and equipment, it is estimated that we waste approximately 35%, or more than 60 million tons, per year, of the wood we cut.

The traditional alcohol raw materials—grains, molasses and petroleum or natural gas—all are badly needed for other purposes throughout the world today. Hence, the importance of producing as much industrial alcohol as possible from other materials is obvious.

The principal component of wood is cellulose—in its cheapest and most abundant form. Cellulose can be converted into sugar and the sugar into ethyl alcohol.

Almost unlimited sawmill waste is available, close to this plant, practically at hauling cost. And the practicability of producing industrial alcohol from wood waste is an established fact.

This Plant is a full-scale commercial expansion of a pilot plant created early in the recent war years at the Forest Products Laboratory (U.S. Dept. of Agriculture) at Madison, Wisconsin. It was built to produce industrial alcohol from sawmill waste by the

continuous percolation process, instead of by the slower, more expensive batch percolation. It has an estimated annual capacity of over 4,000,000 gallons. It will also produce large quantities of numerous valuable by-products, including: Lignin, calcium sulphate, carbon dioxide for dry ice, furfural, methanol, fusel oil, and residue sugars for stock and poultry feeds. It may be equipped for the manufacture of wood sugar molasses and the partial or large-scale production of yeast.

This plant has been operated sufficiently to indicate its commercial possibilities. The buyer will find it necessary to make an additional investment to assure efficient, continuous operation of the plant.

Basis of Offering

This plant is now for sale or lease in its entirety. For further details about the property and full information on how to bid,—phone, write or wire to either address below:

**WAR ASSETS ADMINISTRATION**
OFFICE OF REAL PROPERTY DISPOSAL


1551

Swan Island, Portland 8, Oregon, Phone: Webster 7761, P. O. Box 4062
or Washington 25, D. C.

Personals

CANADA

ROLLIE SCHWINGHAMER, formerly sulfite control engineer at Abitibi Power & Paper Co.'s Thunder Bay mill in Fort William, Ont., has joined the control department of Abitibi at Pine Falls, Man.

P. R. "DICK" SANDWELL, chief engineer, Powell River Co., has returned from a tour of paper mills in the United Kingdom and the Scandinavian countries.

C. L. "LEN" BARKER, vice president and general manager, Hudson Paper Co., prairie subsidiary of Pacific Mills, Ltd.; **Frank W. Thornhill**, newly appointed assistant sales manager, and **Charles E. Cloutier**, Fort William branch manager, were recent visitors to the coast.

OSWALD CRAWFORD, traffic manager of Powell River Co., has been invited to become a founder of the American Society of Traffic and Transportation. There are only three other founder members of this organization in Canada.

ROBERT P. KERNAN, Montreal, was elected chairman of Donnacona Paper Co. directors at a special meeting in Quebec, a by-law creating that position having been passed at the earlier annual meeting. **Louis W. Michael** was elected president and treasurer.

BILL BROOKS, son of the late chairman of the Powell River Co., is now operating a company known as Forest Enterprises, which is engaged in relogging forest lands for pulpwood. Output is sold to Powell River Co.

So far as known, this is the only company doing this kind of a job with A-frames, other operations in British Columbia being usually truck shows.

G. J. LANE, divisional manager of Quebec North Shore Paper Co., Baie Comeau, Que., was a recent visitor to the Pacific coast.

A. B. HENNINGSSEN, representative of Export Sales Co., Vancouver, B.C., in Shanghai, has returned to China after conferring with executives of Powell River Sales Co. and Pacific Mills, Ltd.

RICHARD COLLINS, manager of manufacturing for Consolidated Paper Corp., Montreal, has been appointed a vice-president.

BRUCE LOW, for the past 20 years in the logging business in British Columbia has been appointed personnel and safety director of Powell River Co.'s logging department.

POWELL RIVER CO. has completed installation of a second 18,000 K.V.A. hydraulic turbine and generator at Lois River, 13 miles south of Powell River. The increased power will be used for newsprint and pulp plant extensions to be completed by the beginning of next year. Another paper machine will be installed.

A. B. RECKNAGEL, acting director of the University of British Columbia's school of forestry, recently appointed technical director of forestry, St. Regis Paper Co., was the guest of honor at the annual meeting in Vancouver of the British Columbia Lumber Manufacturers Association. He spoke on "Integration in the Forest Industries," citing the Longview operations of Weyerhaeuser Timber Co. as a classic example of how one big company was making maximum use of its raw materials.

ALEX KOROLEFF, director of research for the woodlands division, Canadian Pulp and Paper Association, Montreal, is leaving soon for India where he will act as advisor in procurement of wood for a new pulp and paper mill.

JOHN LIERSCH, who joined Powell River Co. last spring as forest engineer, has been appointed assistant to Norman English, general manager of all the company's logging operations under Vice-President George O'Brien.

D. J. MUNRO now heads the consolidated woods departments of the Sturgeon Falls and Sault Ste. Marie operations of Abitibi Power & Paper Co. He is divisional woods manager, with E. E. Grainger assistant.

A. S. MANSBRIDGE, sawmill engineer, Pacific Mills, Ltd., outlined plans for a proposed new wood mill at Ocean Falls, incorporating hydraulic barking, whole-log chipping and increased lumber production, at a meeting of company officials in Vancouver, B. C.

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Camas Mill Employees Receive 121 Service Pins



BEN F. WARREN, Chief Industrial Engineer for Crown Zellerbach Corp., delivering address at Camas, Wash., dinner.

Crown Zellerbach Corp. also held a service pin banquet April 7 at Camas, Wash. A total of 121 pins were presented by Louis Bloch, chairman, San Francisco. In welcoming the attending group, F. A. Drumb, resident manager of the Camas plant, pointed out the mutual satisfaction which can result from long association between a firm and its employees.

Address of the evening was given by Ben F. Warren, chief industrial engineer of Crown Zellerbach Corp. He told of the close relationship of stable employment and stable industry and stable society. V. C. Gault, personnel supervisor, was master of ceremonies.

Personnel receiving 35-year pins include William E. Ginder, William T. Newcomb, Arvia B. Hughes, William L. Pugh and Benjamin H. Reed.

Thirty-year pins were presented to Henry E. Alder, Andrew B. Chappell, Sherwood D. Dorman, John T. Hunter, O. C. Rogers, Katie Ronchette, Cloice W. Timmons, Ray E. West, Walter Williams and William E. Wright.

Twenty-five-year pins went to Robert L. Barnett, Elmer W. Clark, Oliver L. Darling, Frank Dunn, Milan B. Hill, George W. Lovett, Thomas J. Palmer, Charles G. Ramsey and George N. Seeley.

Swedes Flock to U. S. To Visit Mills

Prominent members of the industry in Sweden were in the United States in April. They included Einar Flygt, sales director of the Cellulose Sales Co.; Ragnar Lagergren, managing director of Nordsvenska Bruk; Dr. Gunnar Sundblad, managing director of Iggesund's Bruk; Ejnar Rodling, managing director of Stora Kopparberg's A/B; Haaken Gulander, sales director of Stora Kopparberg's A/B; and Helge Arvidson, pulp exporter. At least six or eight others from the industry were known to be touring the country.

TWO EXECUTIVES of Billerubs Aktiebolag in Saffle, Sweden, a pulp and wood products industry of that country, have been making a tour of North American industries in order to gather knowledge of processes. They are Walter Ameen, chief engineer, and Tryggve Bergek, director of research, for the Swedish company and they had reached the Pacific Coast in early April on their tour.



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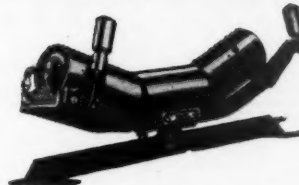


Stebbins Engineering Corporation

TEXTILE TOWER

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A NEW PATENTED self-aligning belt conveyor idler, said to be distinct improvement over existing types, is announced by Continental Gin Co., Industrial Div., Birmingham, Ala. It is made for troughed, flat and return belts. Includes heavy duty Timken Bearings on the 1 1/4" swivel shaft; all grease pipes extended to side for easy lubrication (picture at right).



New Book on Forming Of Stainless Steels

A new amply illustrated 309-page book, most timely because of greatly increasing use of stainless steels in the pulp and paper industry, is "Forming of Austenitic Chromium-Nickel Stainless Steels," compiled by Vsevolod Krivobok of International Nickel Co., and George Sachs of Case Institute.

It gives fabricators of metal equipment a better understanding of the exceptional adaptability of stainless steels to all modern processes of forming. This book presents a detailed description of the modern forming procedures as applied to chromium-nickel stainless steels and as practiced in fabrication plants of the United States.

Unexpected demand for the book exhausted the initial printing, and a second printing was to be off the press about May 1. The book is available by mailing checks of \$4.00 for each copy to International Nickel Co., Inc., 67 Wall St., New York 5, N. Y., or International Nickel Co. of Canada, Ltd., 25 King St. West, Toronto 1, Ontario.

Instrument Men Offered Instruction at Bristol Co.

The Bristol Co., Waterbury, Conn., is conducting a series of courses for plant instrument and operating men in "Theory and Application of Industrial Instruments." Each course consists of two weeks of intensive lectures and laboratory work, with special emphasis on instrument maintenance and repair, under the direction of Mr. F. A. Faust, Education Department, The Bristol Co., Waterbury 91, Conn.

LONGFIBRE BOWLING LEAGUE, made up of Longview Fibre Co. personnel at Longview, Wash., has concluded a 22 weeks' season with its annual social meeting at the Longview Country Club. The pulp mill team was tops in this 12-team, 110-man league. E. Bogard, of the pipefitters team, bowled the highest single scratch game of the season, winning the Kerns trophy. Chuck Davis, office clerk, was elected league president; E. Bogard, pipefitter, vice president, and George Mickel, box order department, secretary.

Red Ray for Faster Drying DISCUSSED AT LOS ANGELES

G. R. Van Kampen, sales manager, Red-Ray Manufacturing Co., Inc., New York, introduced a comparatively new subject to some 60 members of the Paper Makers & Associates of Southern California, at the March 18 meeting, held at Lynwood, Los Angeles. It was: "Auxiliary Gas Drying on the Paper Machine." (To be published in a later issue).

Use of gas burners or rays of one kind or another for faster drying of paper is of wide interest in this industry. Nowhere has there been a livelier interest shown than in Southern California. One mill has a series of inverted refractory cups three inches above the sheet, getting complete combustion of natural gas fuel and raising refractory in the cups to incandescence. A 10% increase in drying production is claimed.

Alonzo Hatch, Container Corp. of America acted as temporary chairman, substituting for W. G. Hartford, recently transferred to Ohio Box Board Co., Rittman, Ohio. The former U. S. Gypsum Co. superintendent at Los Angeles was voted an honorary life membership. C. C. Thiel, the new U. S. Gypsum superintendent, assisted the meeting as secretary-treasurer.

Time limit for receipt of papers for the annual George M. Cunningham Award was extended to March 31, William A.



AT PMASC MEETING IN LOS ANGELES (l. to r.): G. R. VAN KAMPEN, Sales Manager for Red-Ray Mfg. Co., N. Y., spoke on "Auxiliary Gas Drying on the Paper Machine." L. M. WOODSIDE, Service Engineer, and HARRY H. STILWELL, Pacific Coast Manager, Albany Felt Co., were guests at the meeting.

Kinney, Pioneer-Flintkote Co., announced. Winner of the \$100 award is to be chosen and his paper, dealing with a subject interesting to papermaking or allied phases, will be read at the May meeting.

Chairman Hatch named Otto Sass, Pioneer-Flintkote Co. as chairman of the nominating committee to choose new officers to serve during the coming year, these to be announced at the May meeting.

Ernest Dutcher, safety engineer at Flintkote spoke on final hearings for new safety rules governing the papermaking industry, being formulated by the California State Industrial Safety Commission.

Waste Treatment Plant At Riegel Mill

A pilot plant for treatment of wastes discharged from a mill producing specialty paper products has been erected at the Warren Glen Mill of the Riegel Paper Co. This plant will be operated cooperatively by the company, Metcalf and Eddy, their consulting engineers, and the National Council of Stream Improvement for a period of several months to determine how effectively the waste can be purified and residual sludge handled by the methods employed. Nelson Nemerow of Rutgers University will be resident engineer for the council.

A pilot plant study of the clarification of mixtures of pulp mill wastes, rejected white waters and deinking washer waste was completed last month at a New York and Penn Co. Mill.

Mechanical Handling At Powell River Co.

As a part of its modernization program, which is being applied to almost every phase of the big mill's operation, Powell River Co. has eliminated the waterflume which used to carry millions of blocks of pulpwood from the old barker mill to the grinder room. Trains loaded with wood have been supplying the new grinder room, but this system is also being dispensed with in favor of mechanical handling by loaders and carriers.



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